

FIG 1A

2/137

208270-15065007

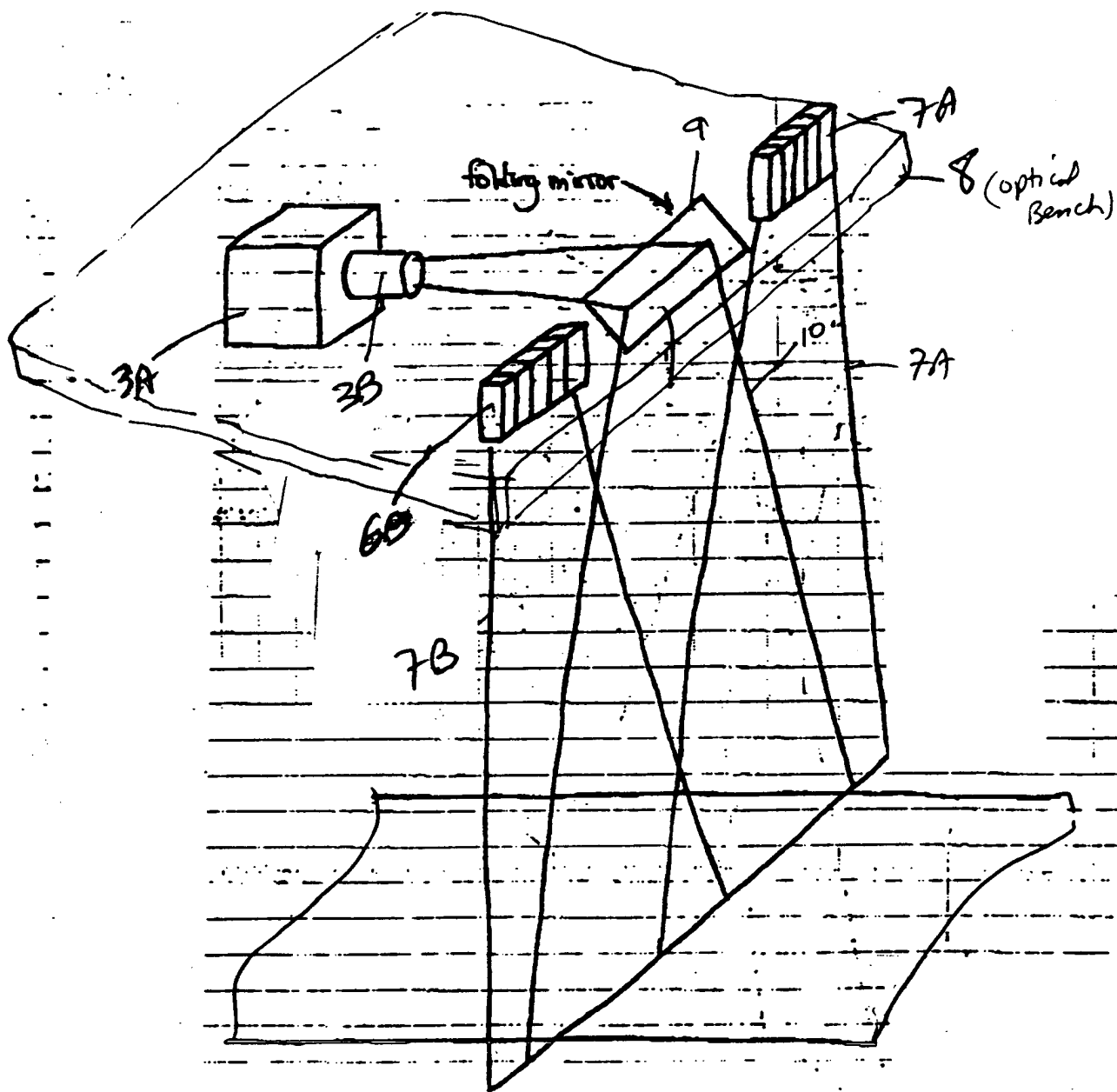


FIG. 1B1

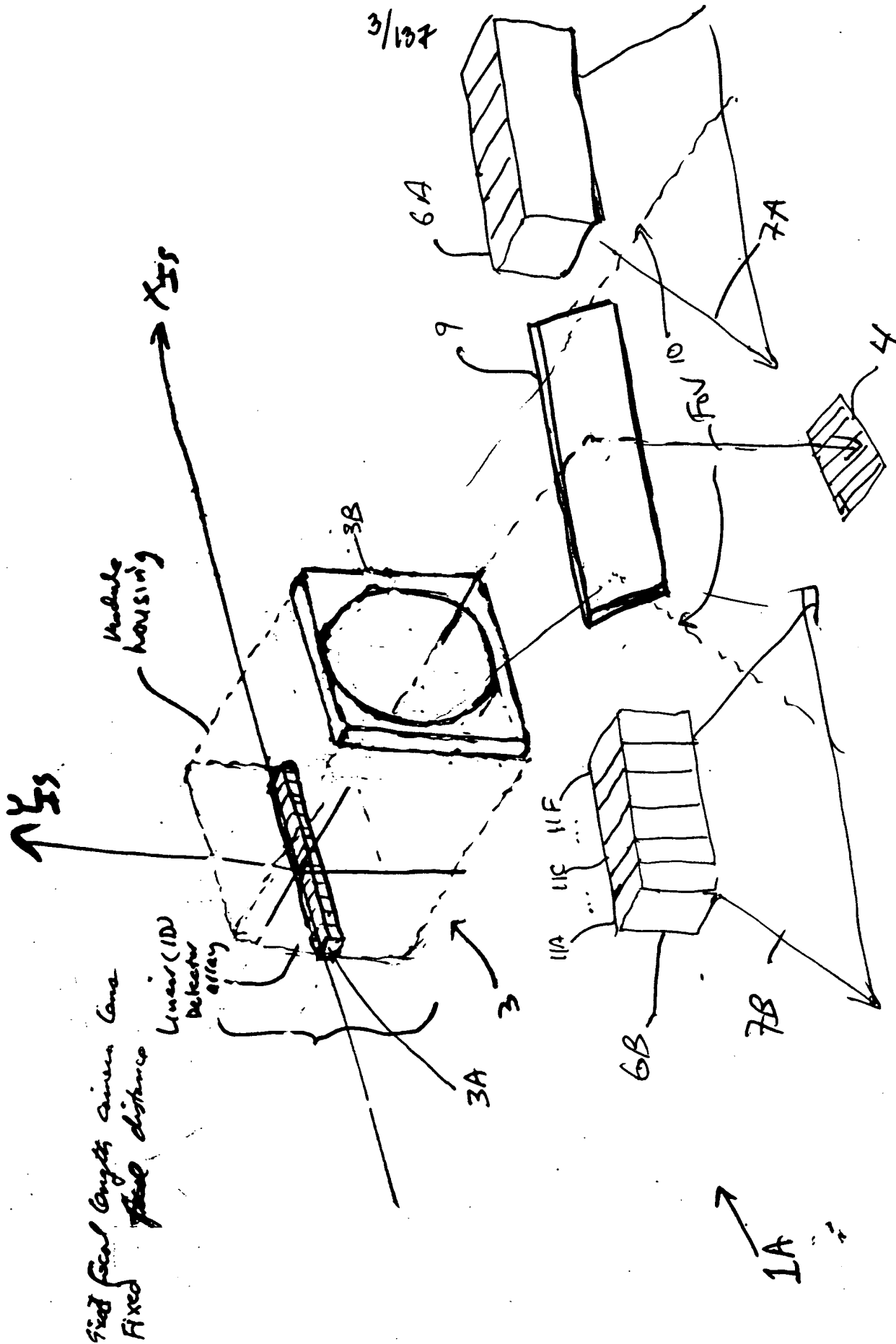


FIG. 1B2

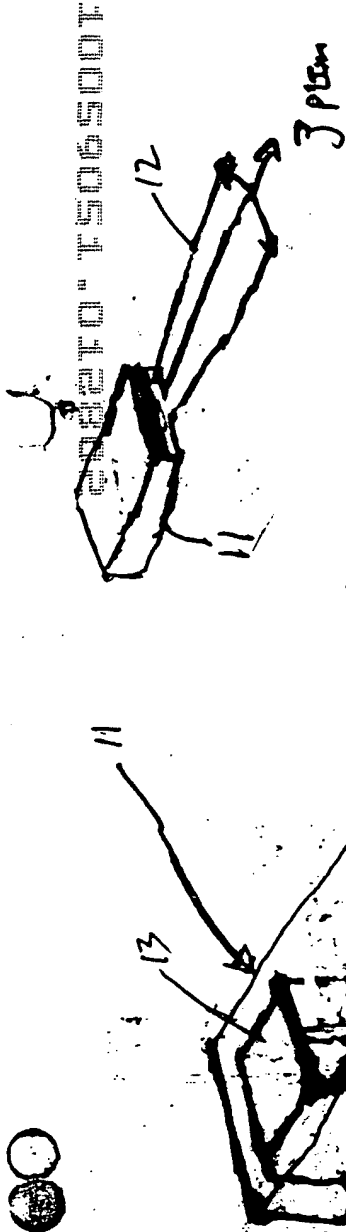


FIG. 1C

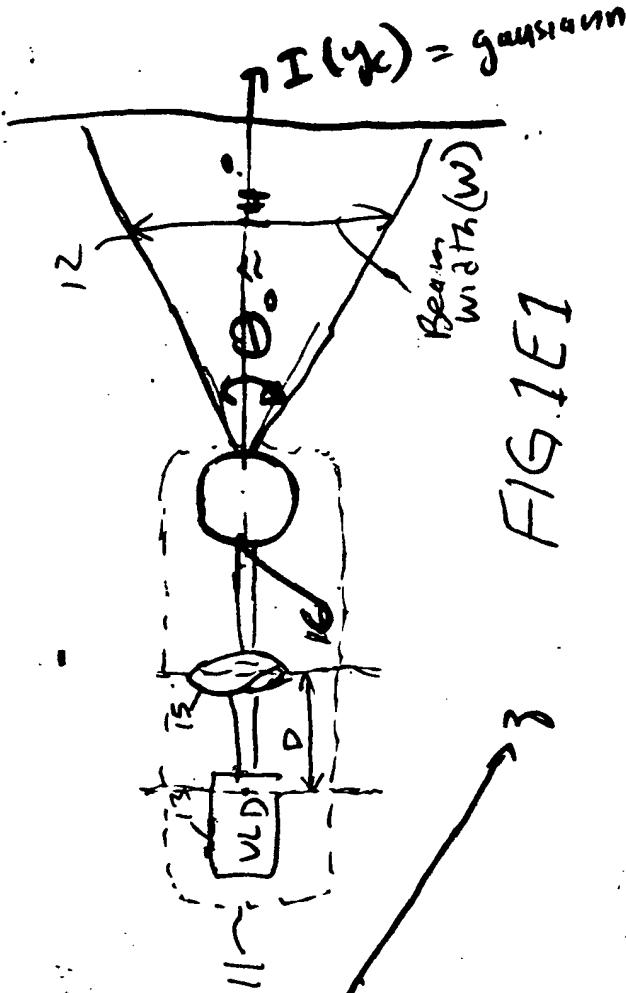


FIG. 7E1

4/137

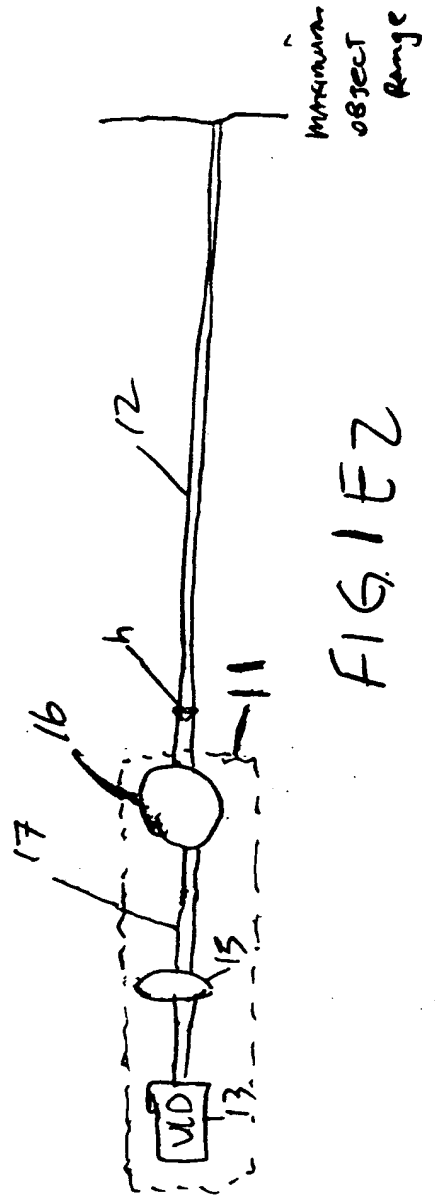


FIG 1E2

5/137

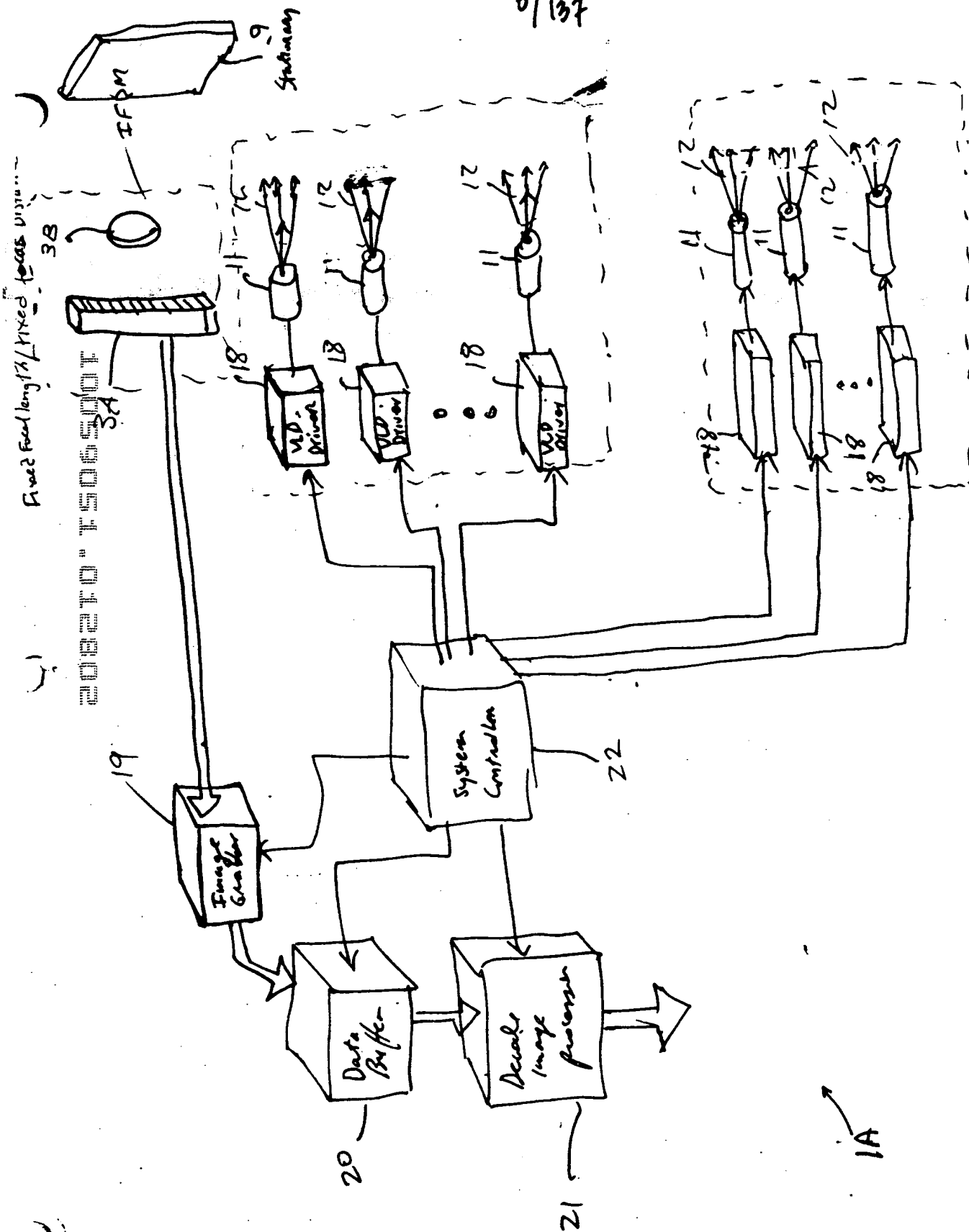


FIG. 1F

6/137

208210" T506500T

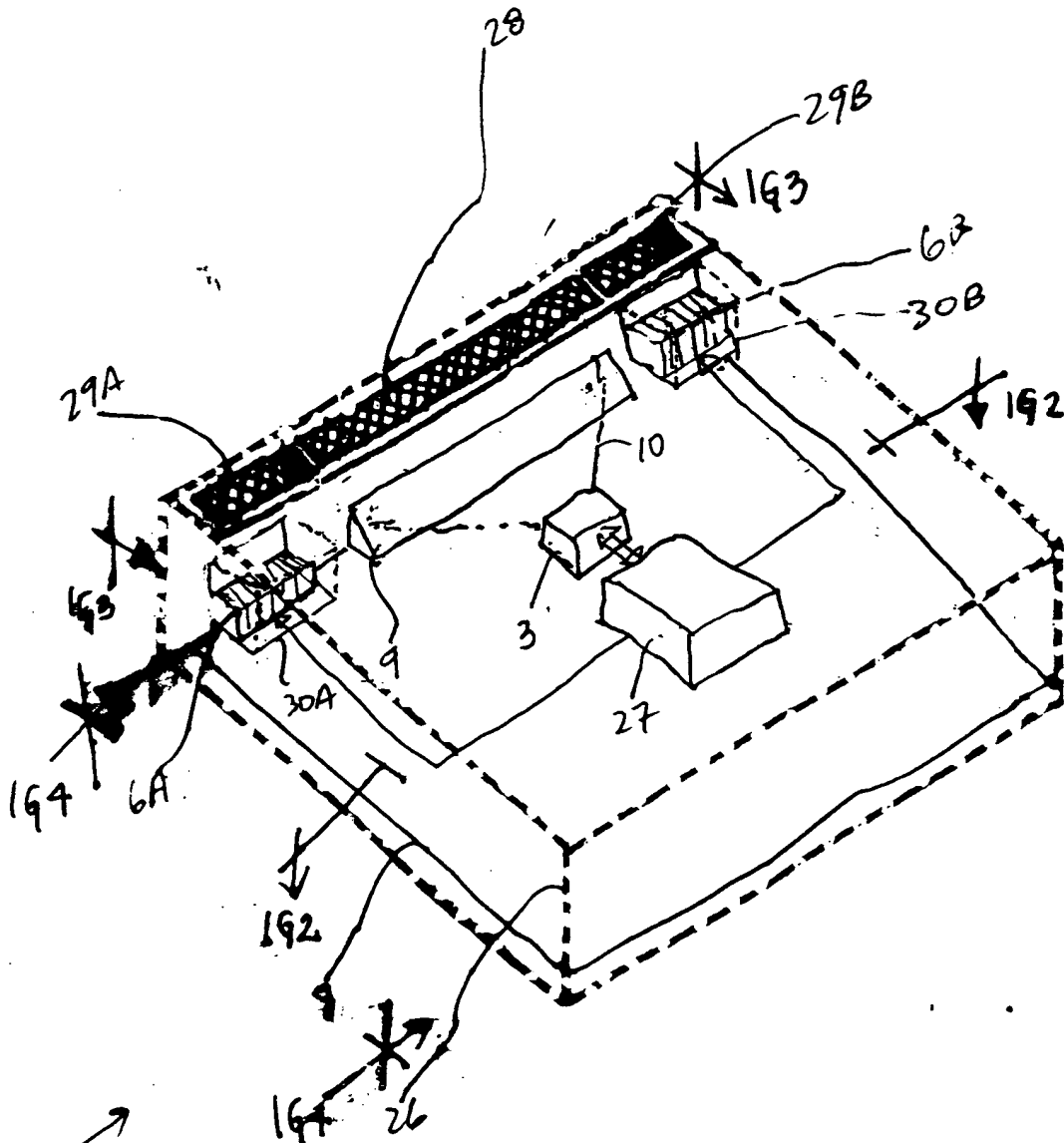


FIG 1G1

7/187

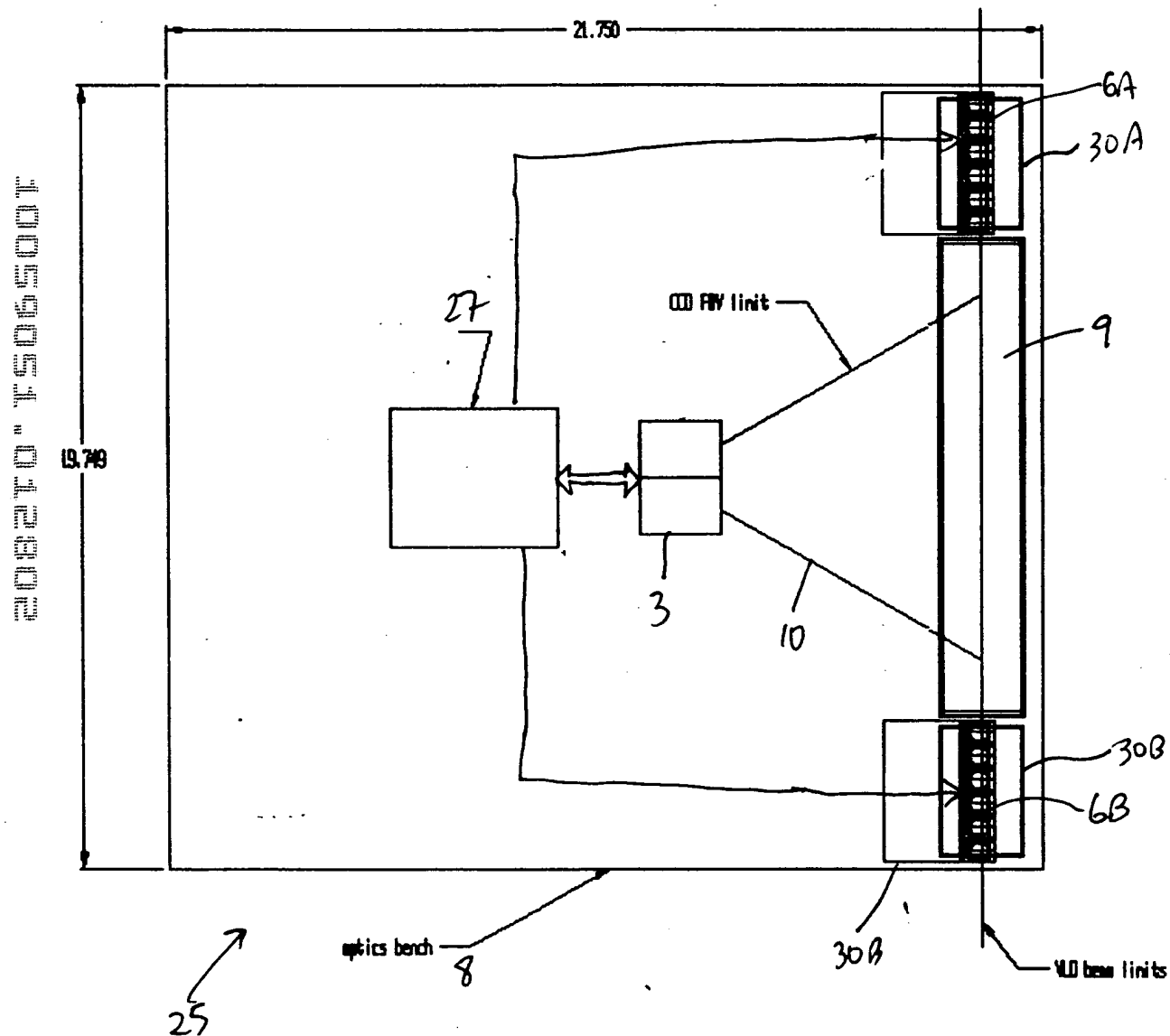


FIG. 162

8/137

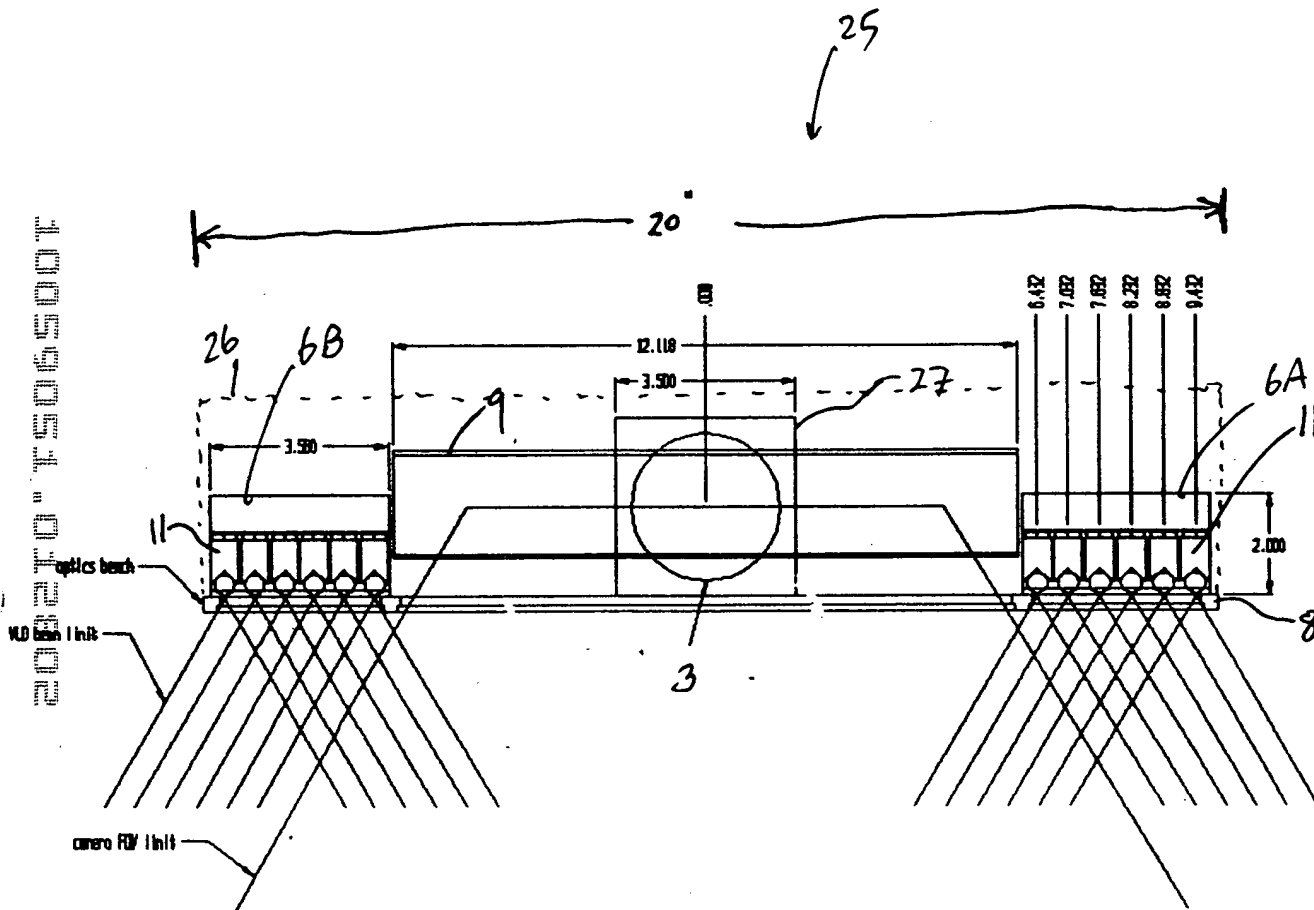


FIG. 16.3.

9/137

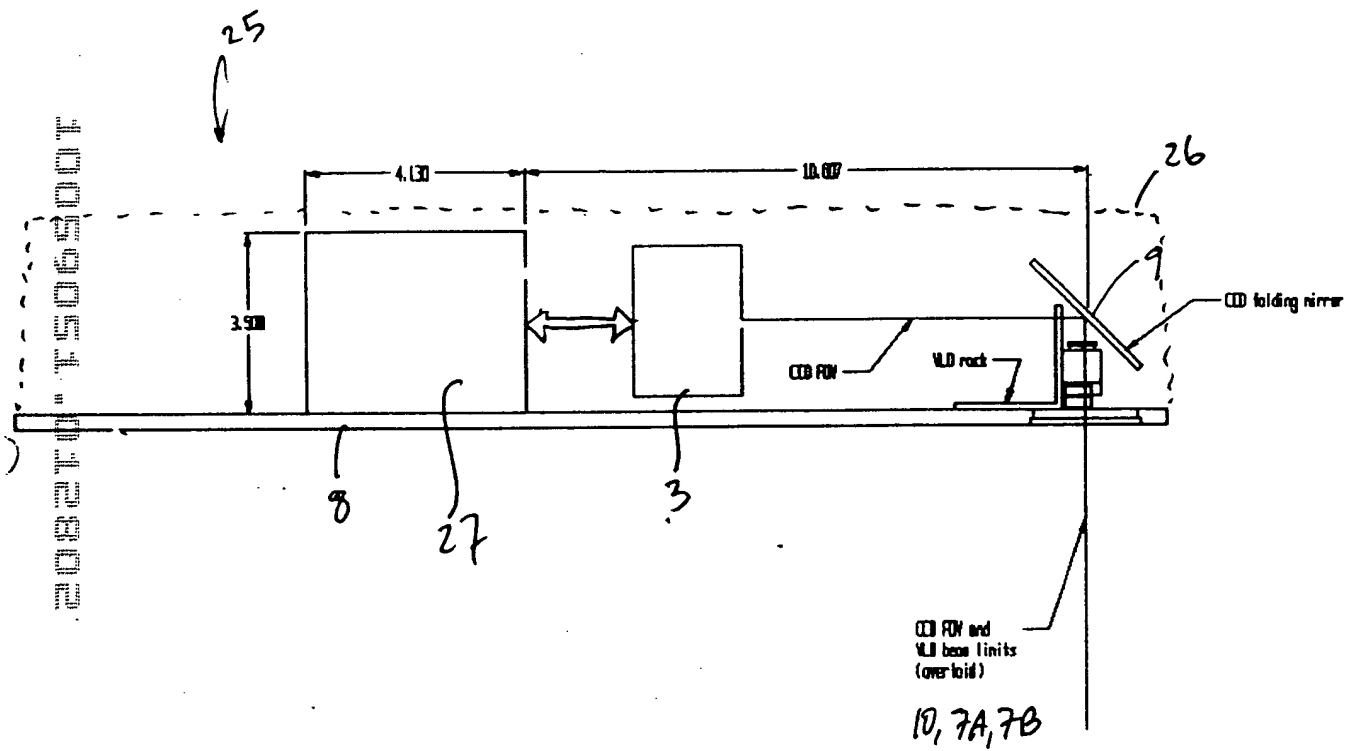
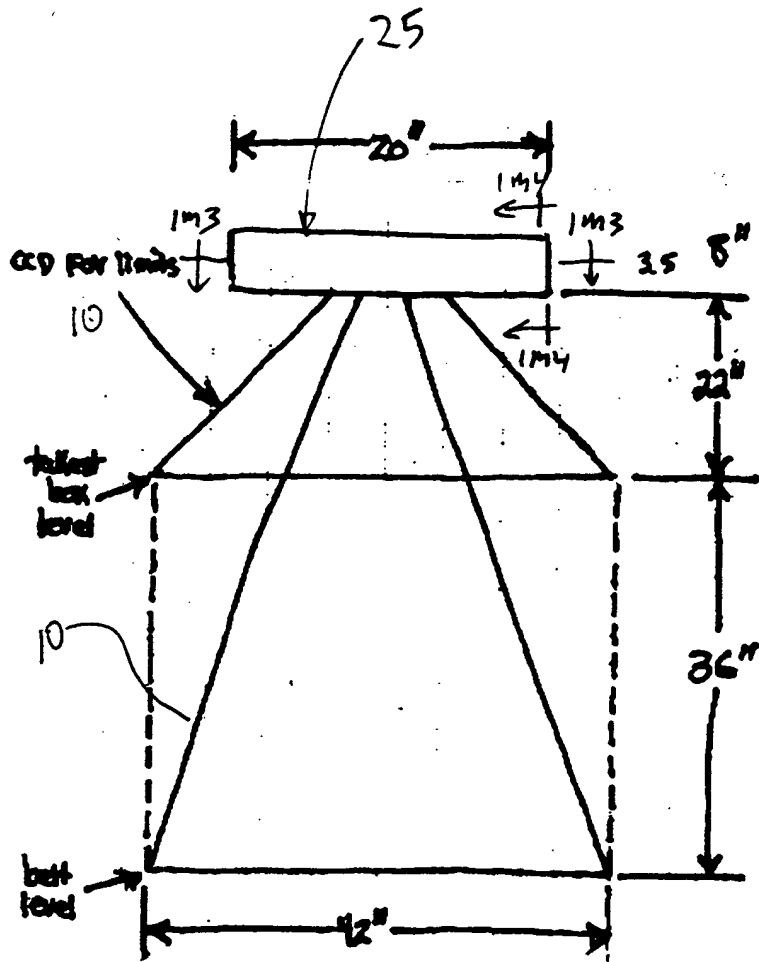


FIG. 1G4

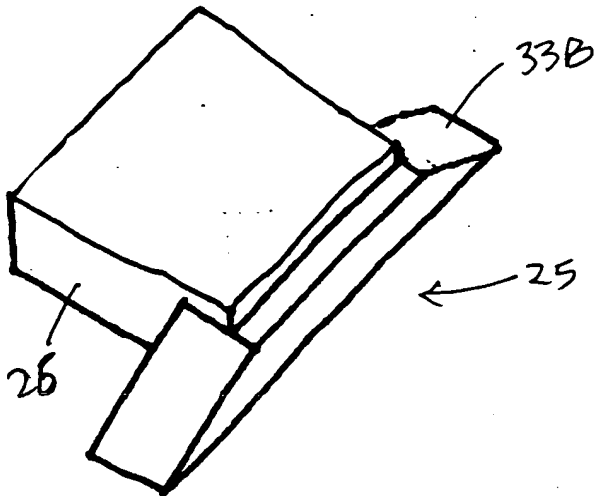
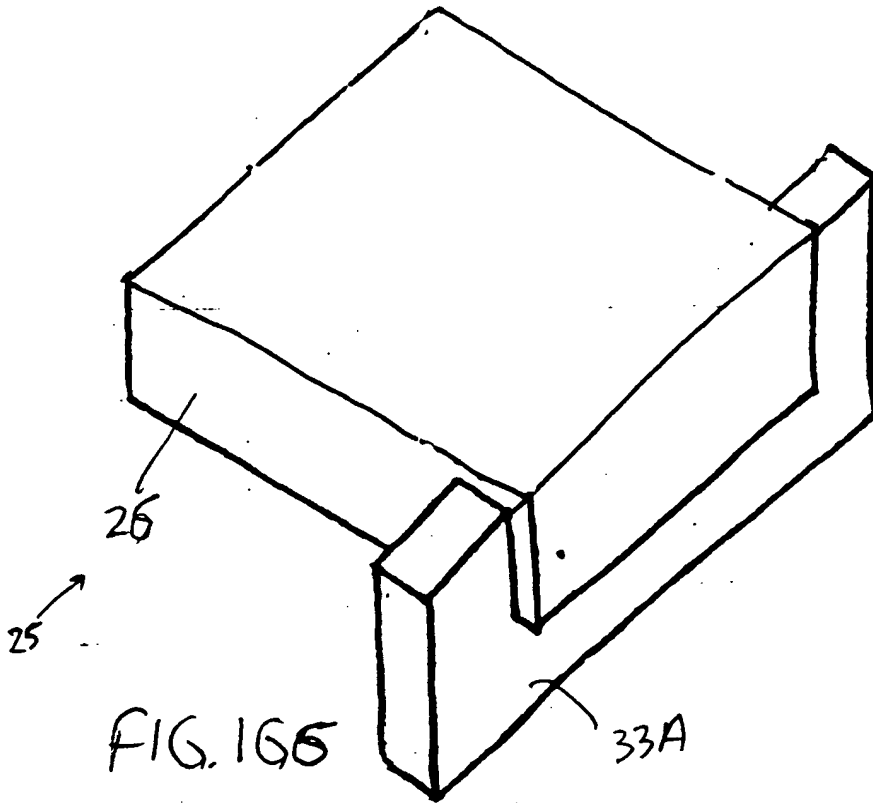
10/137



* Fixed Field of Field

FIG. 145

208210" T506500T



202210 T5065007

12/137

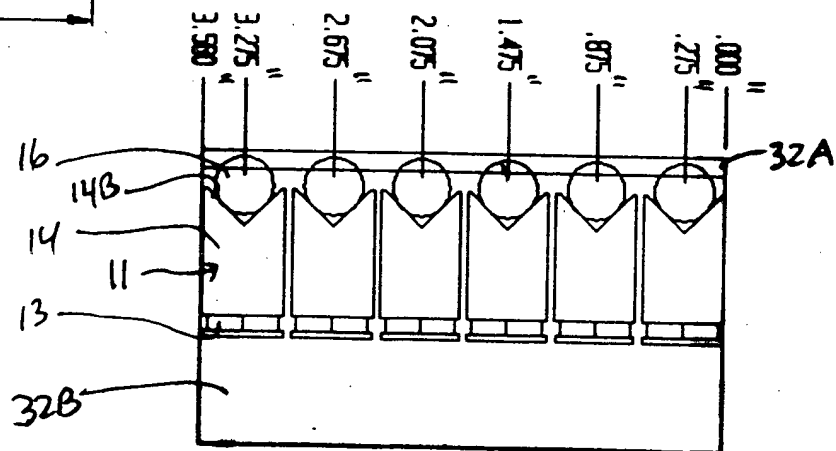
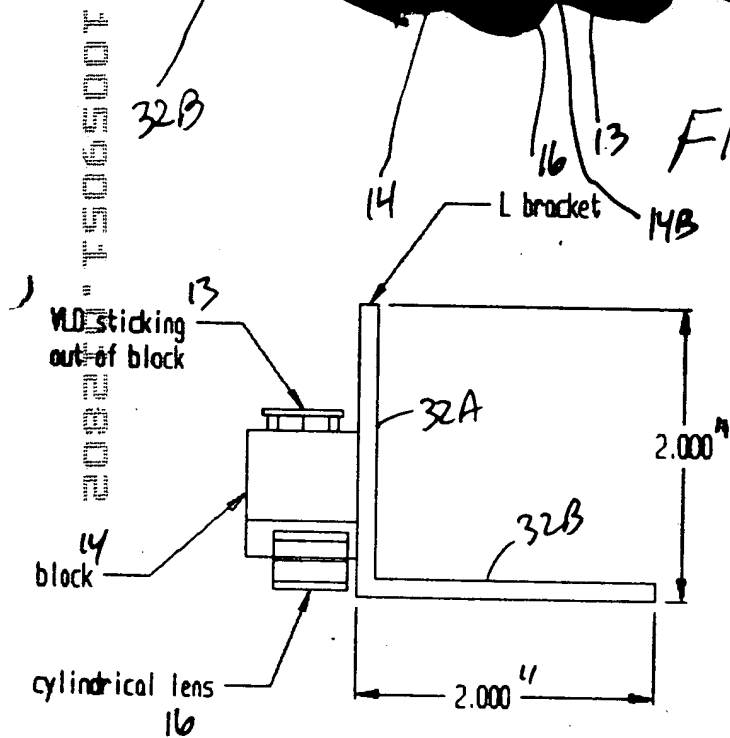
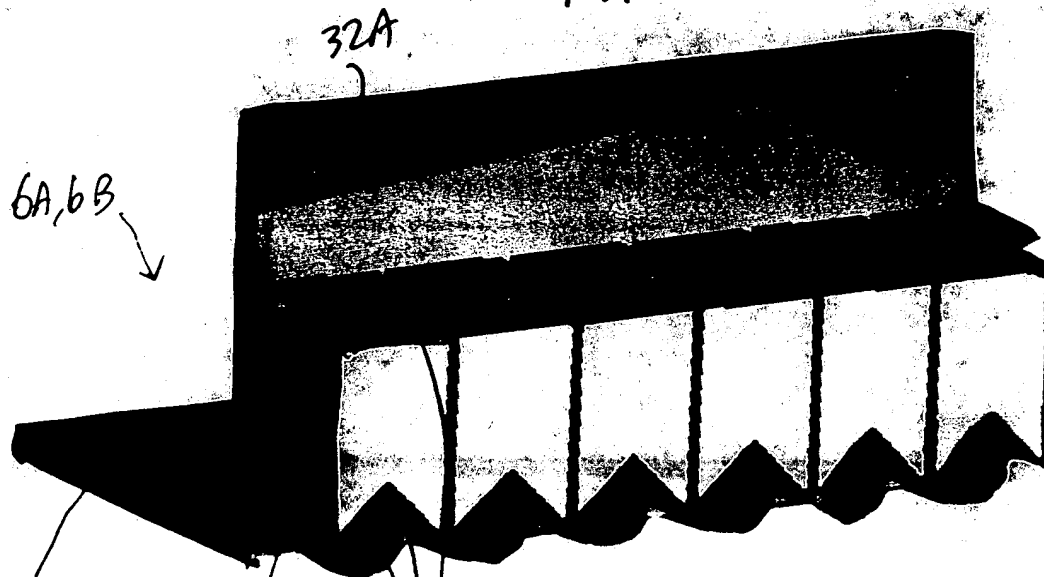
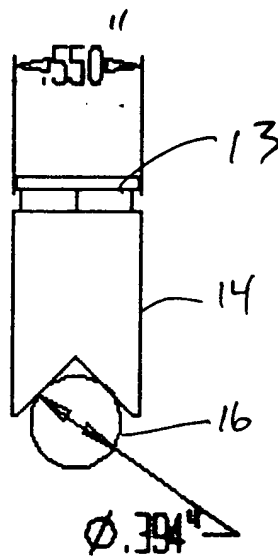
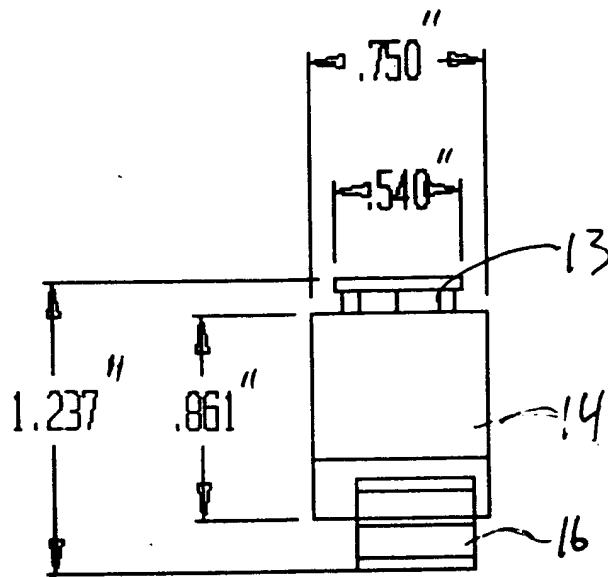


FIG. 1G10

13/137



10059051.012802

14/137

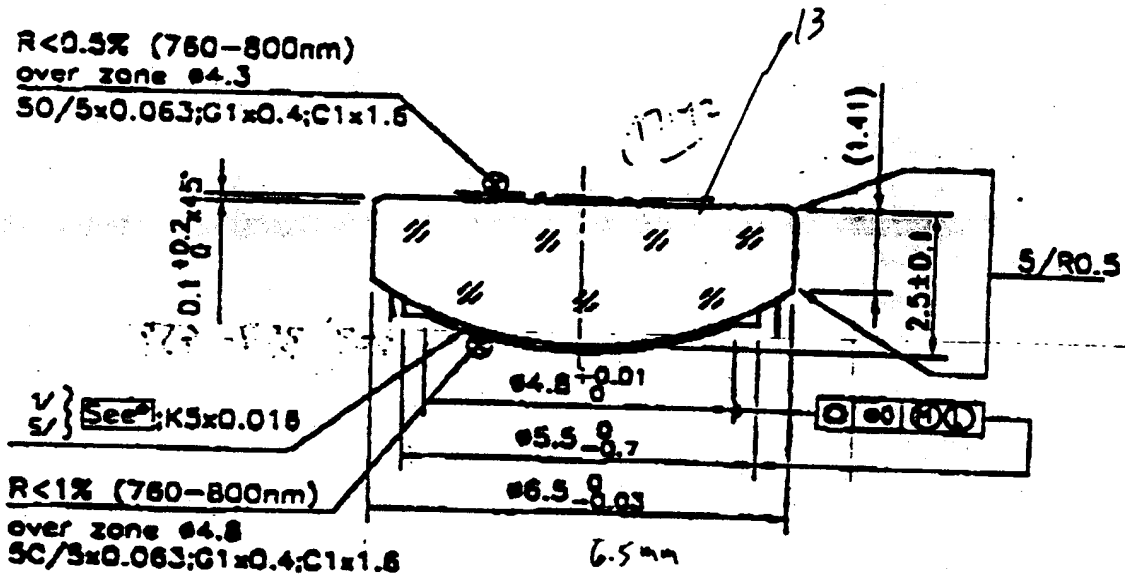


FIG. 1H1

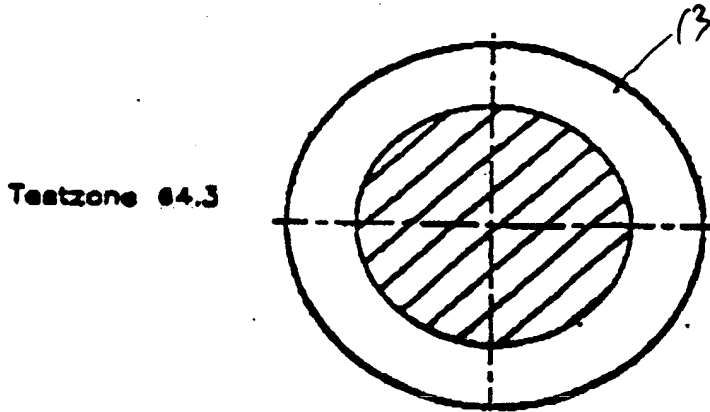


FIG. 1H2

208210" T506500T

15/137

208270" T506500T

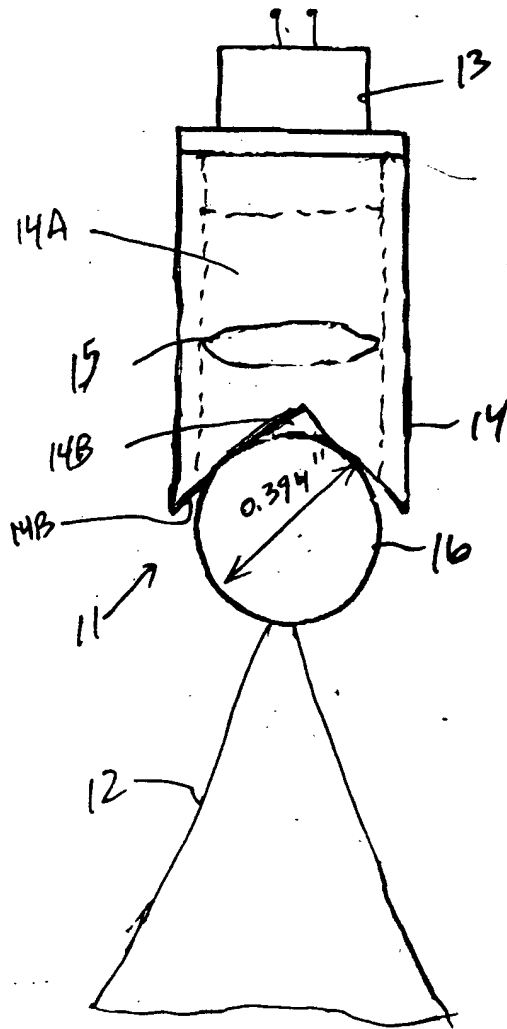


FIG 1I1

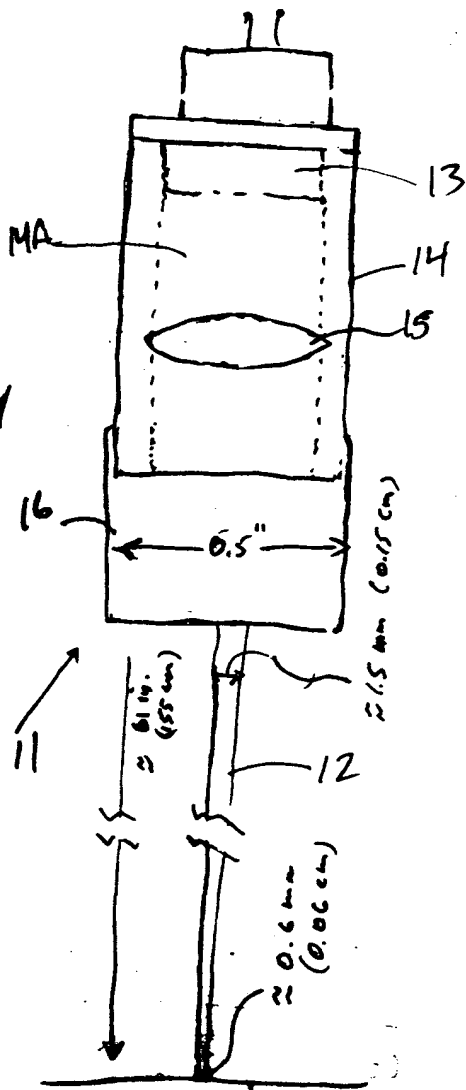


FIG. 1I2

furthest
object/working
distance

16/137

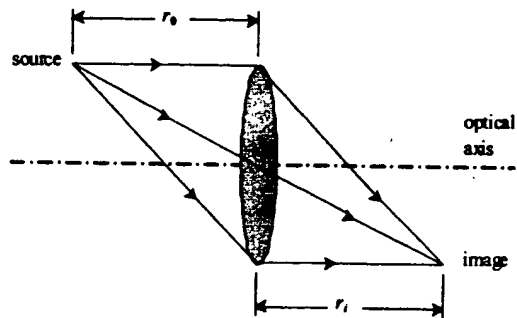


FIG. 1J1

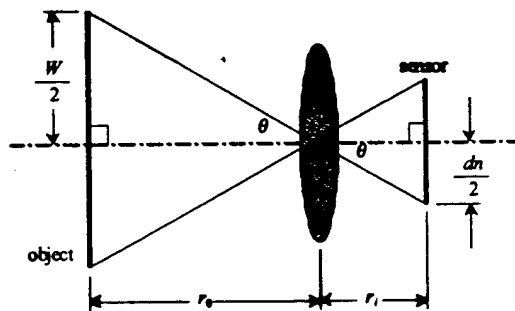


FIG. 1J2

208270"TS06500T

10069051.012802

17/137

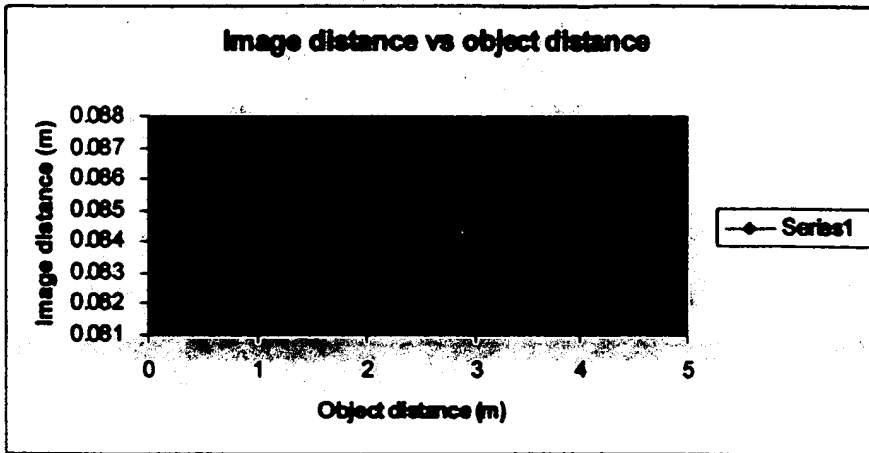


FIG. 1J3

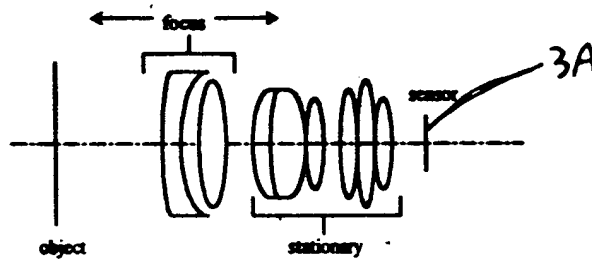


FIG. 1J4

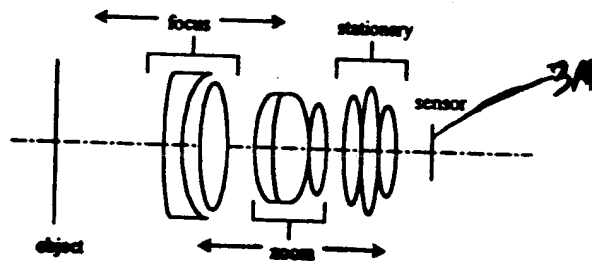
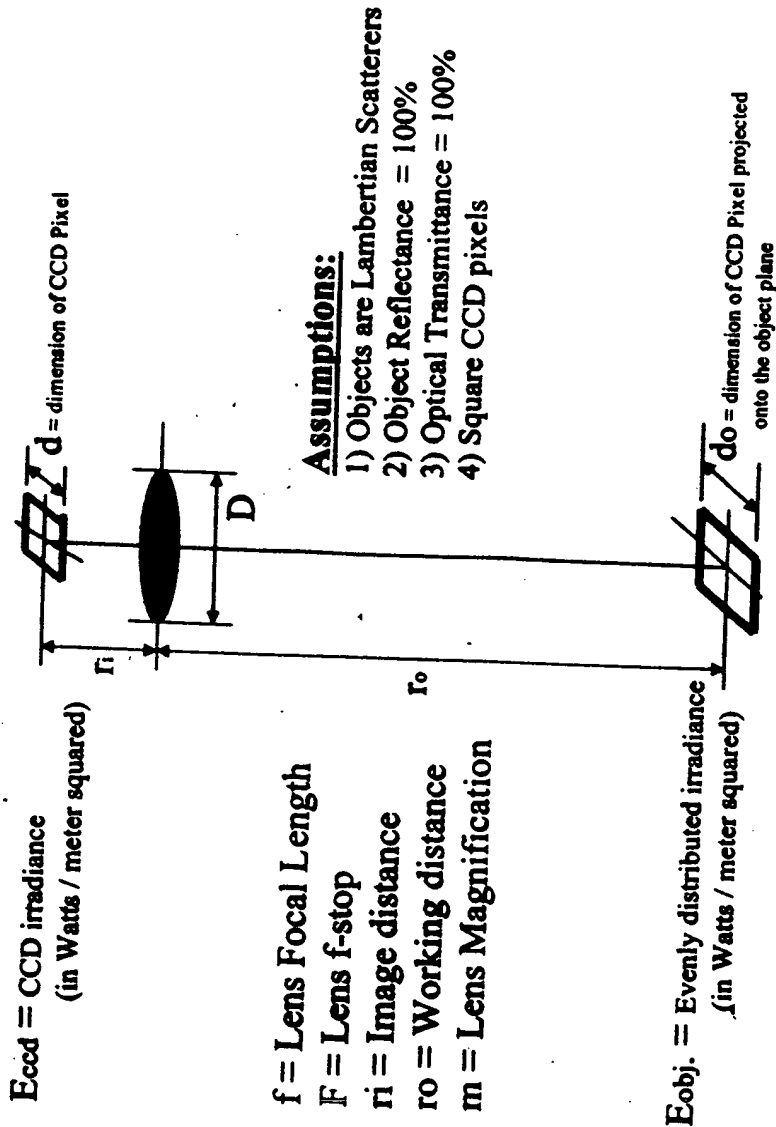


FIG. 1J5

208270-15065001

10/137



CCD-Based Scanner

FIG. 1J6

14/137

Fixed focal length lens
Cases

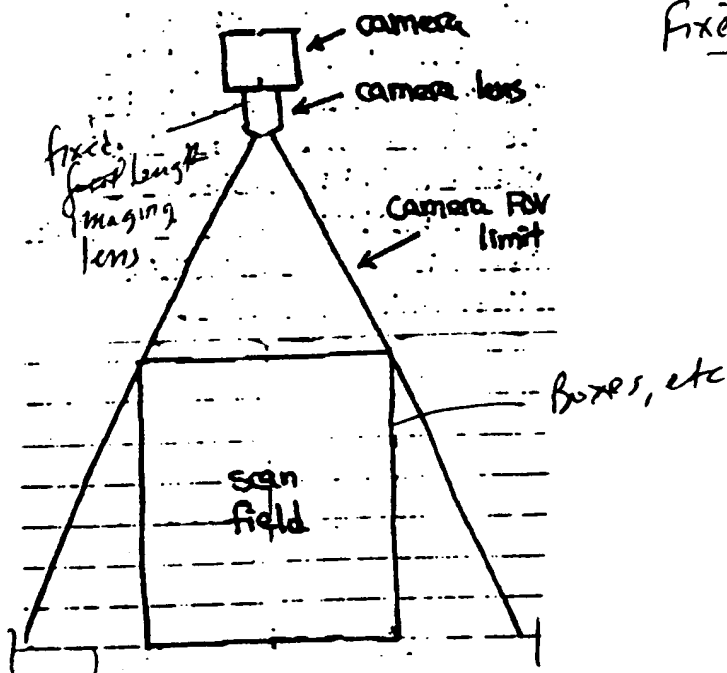
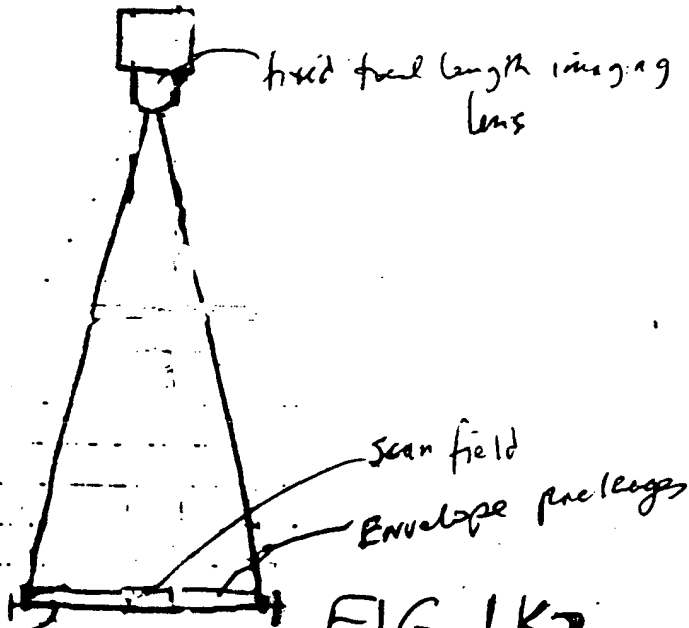


FIG 1K1
conveyor 34



conveyor
34

FIG 1K2

208270-15065001

202207506500T

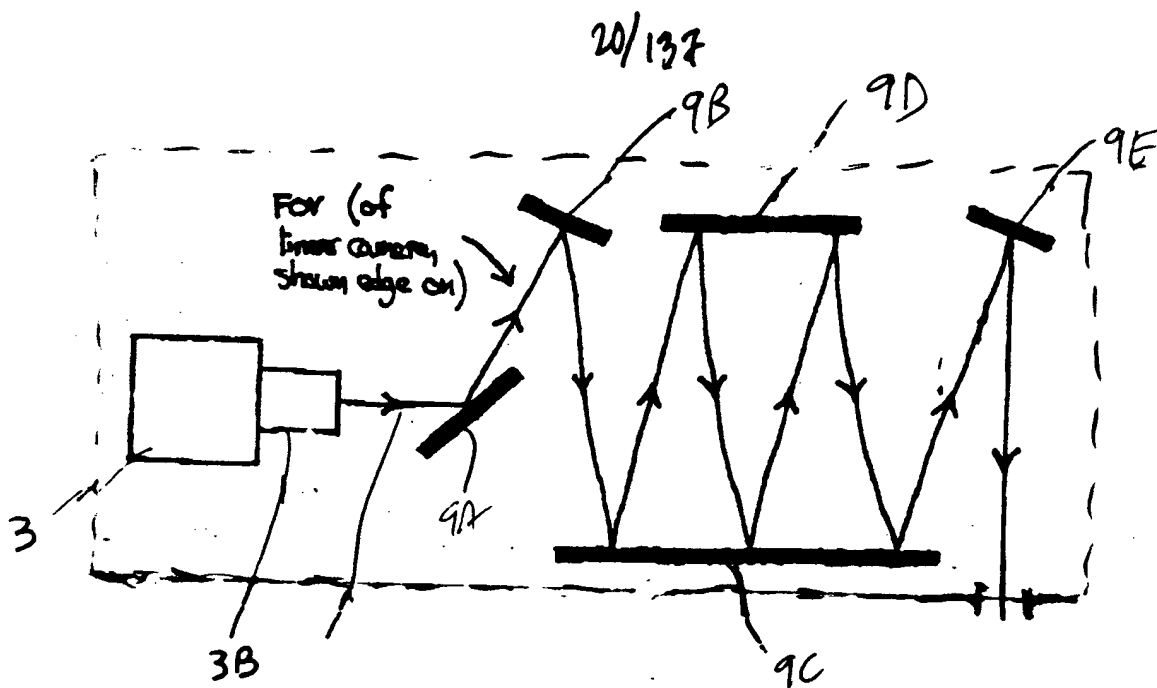


FIG. 1L1

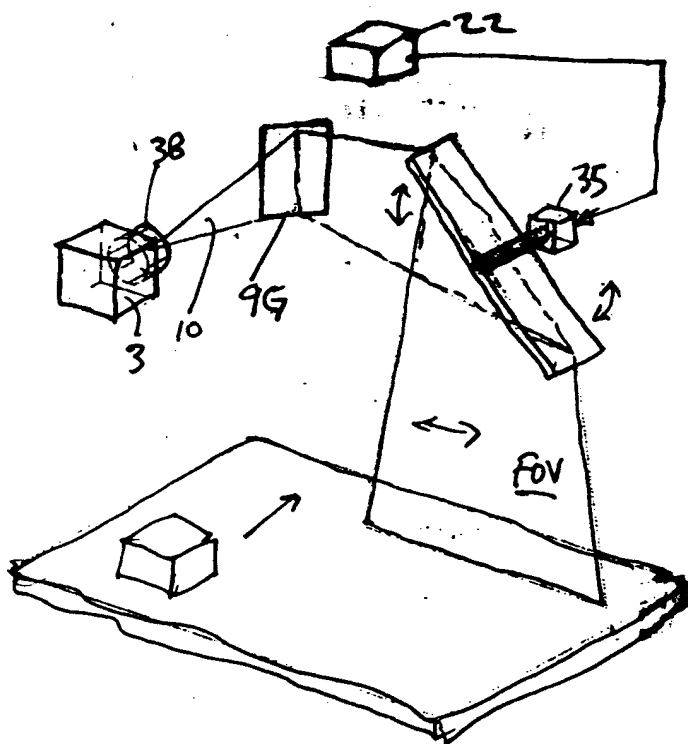


FIG. 1L2

21/137

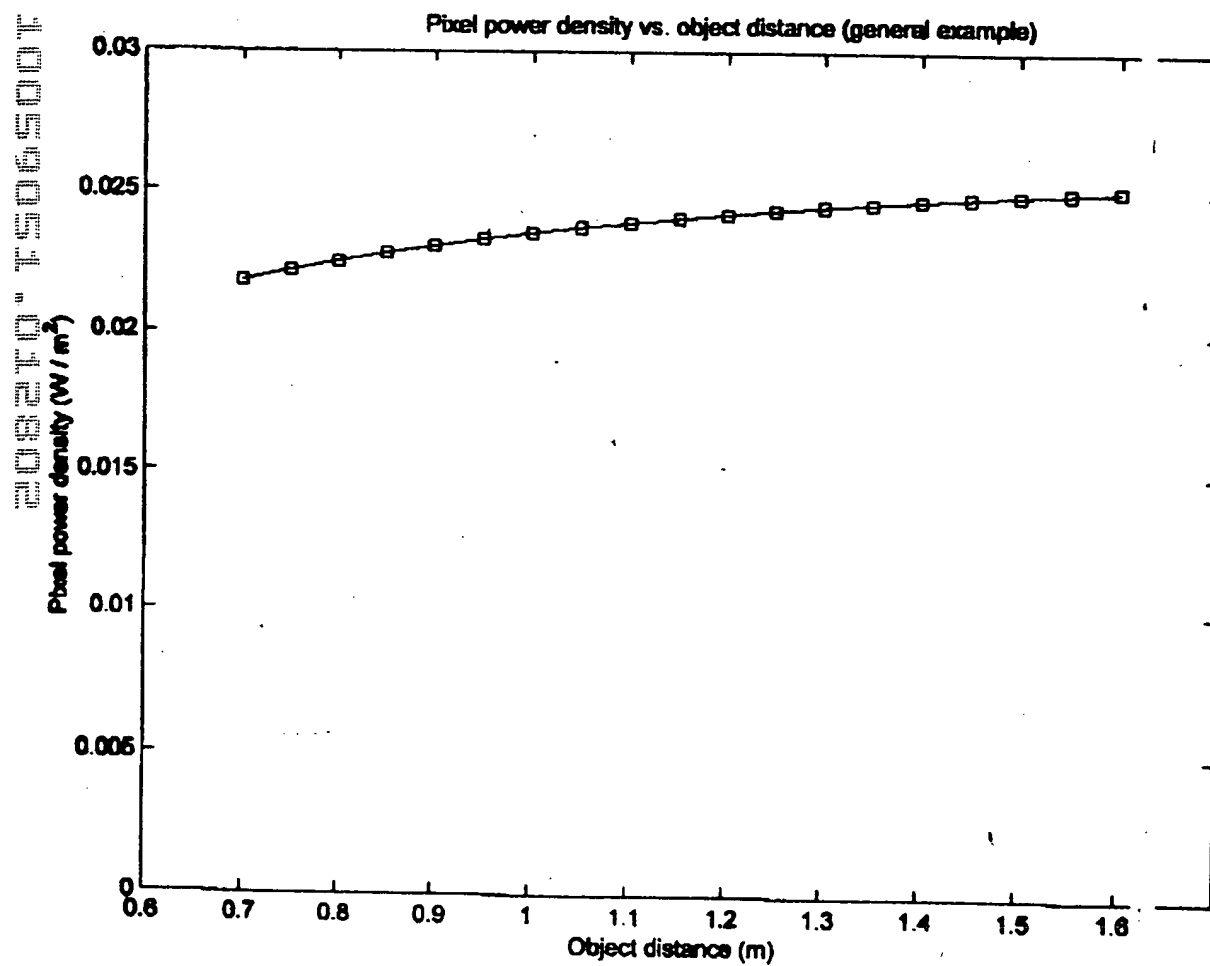


FIG. 1M1

22/137

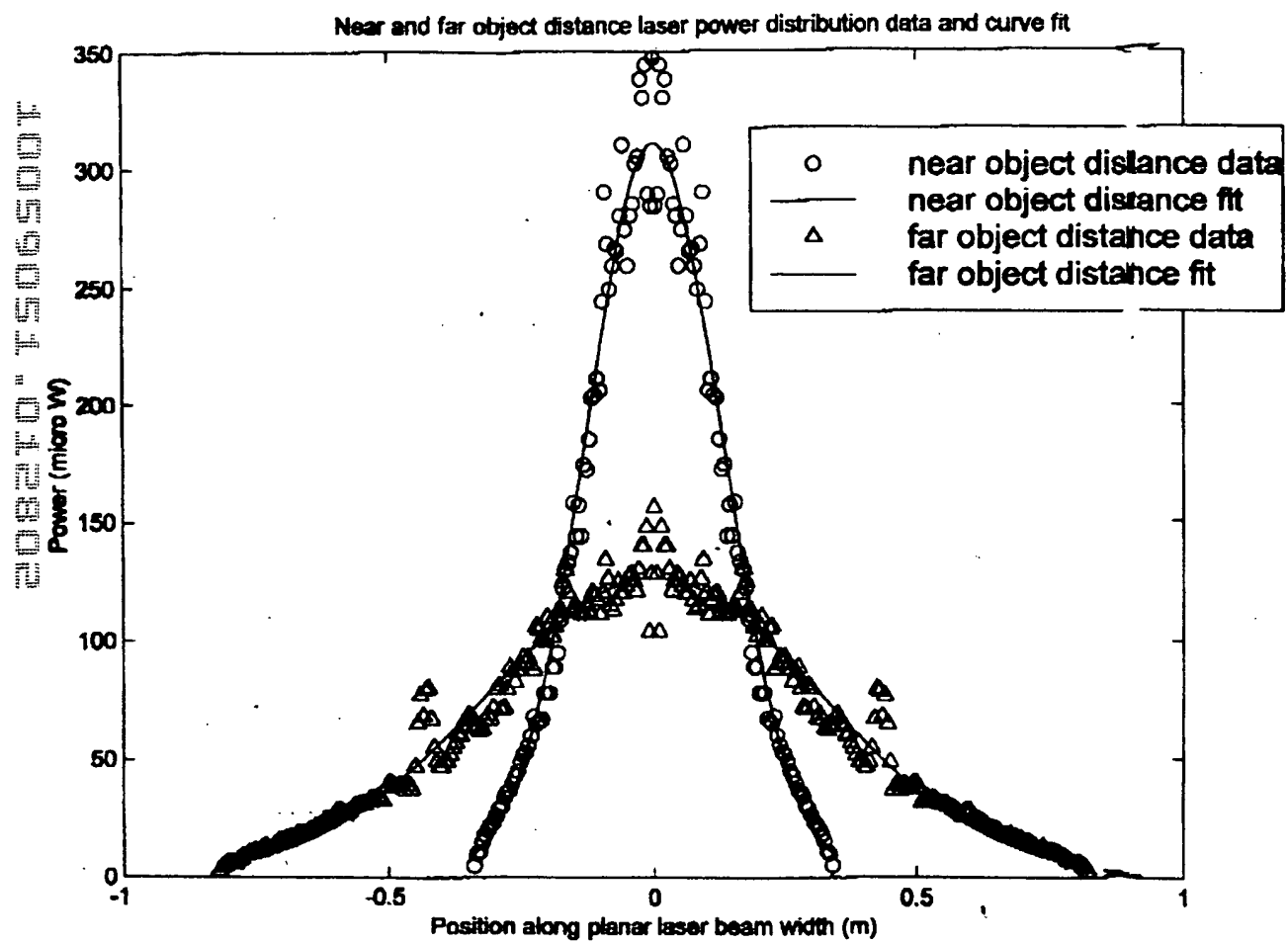


FIG. 1M2

23/137

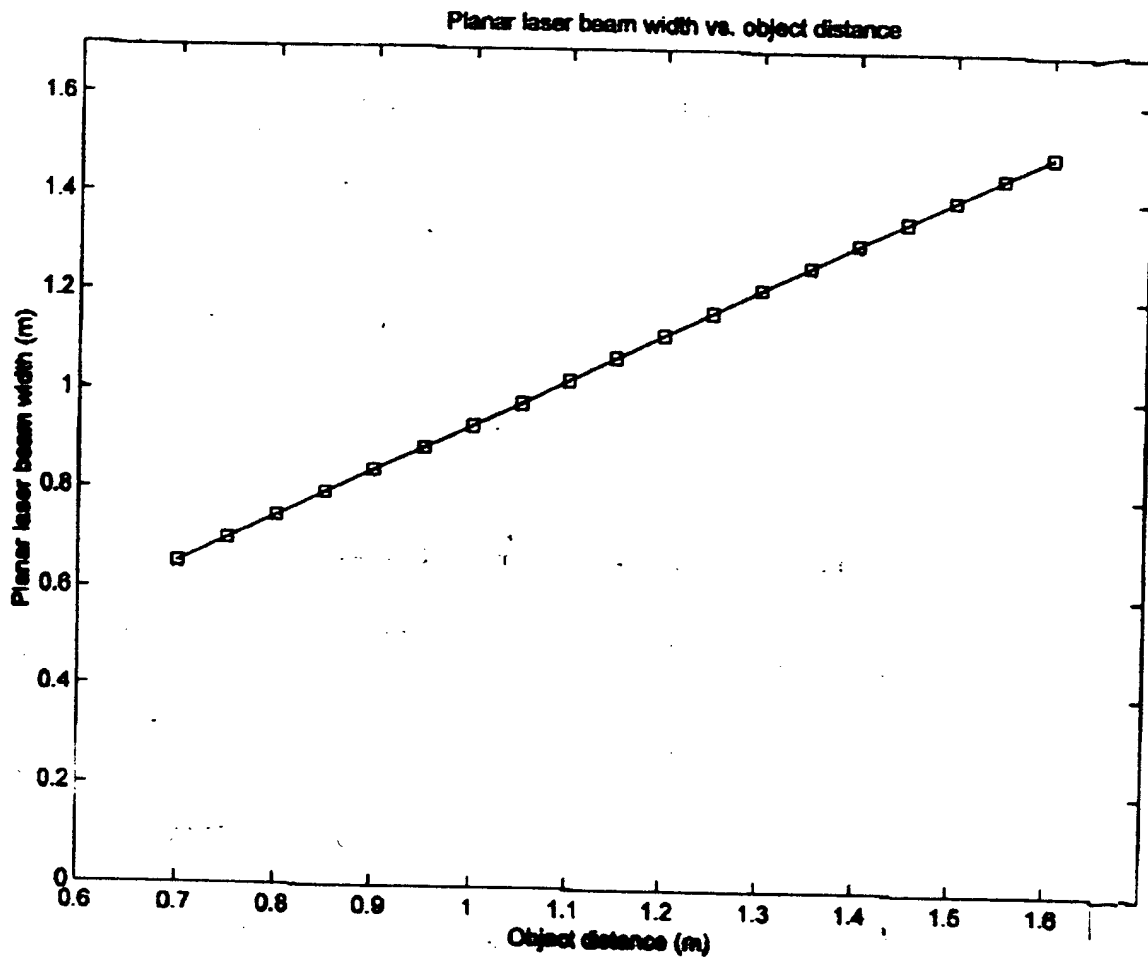


FIG. 1M3

24/137

Figure 4: Planar laser beam height vs. object distance (far object distance focus)

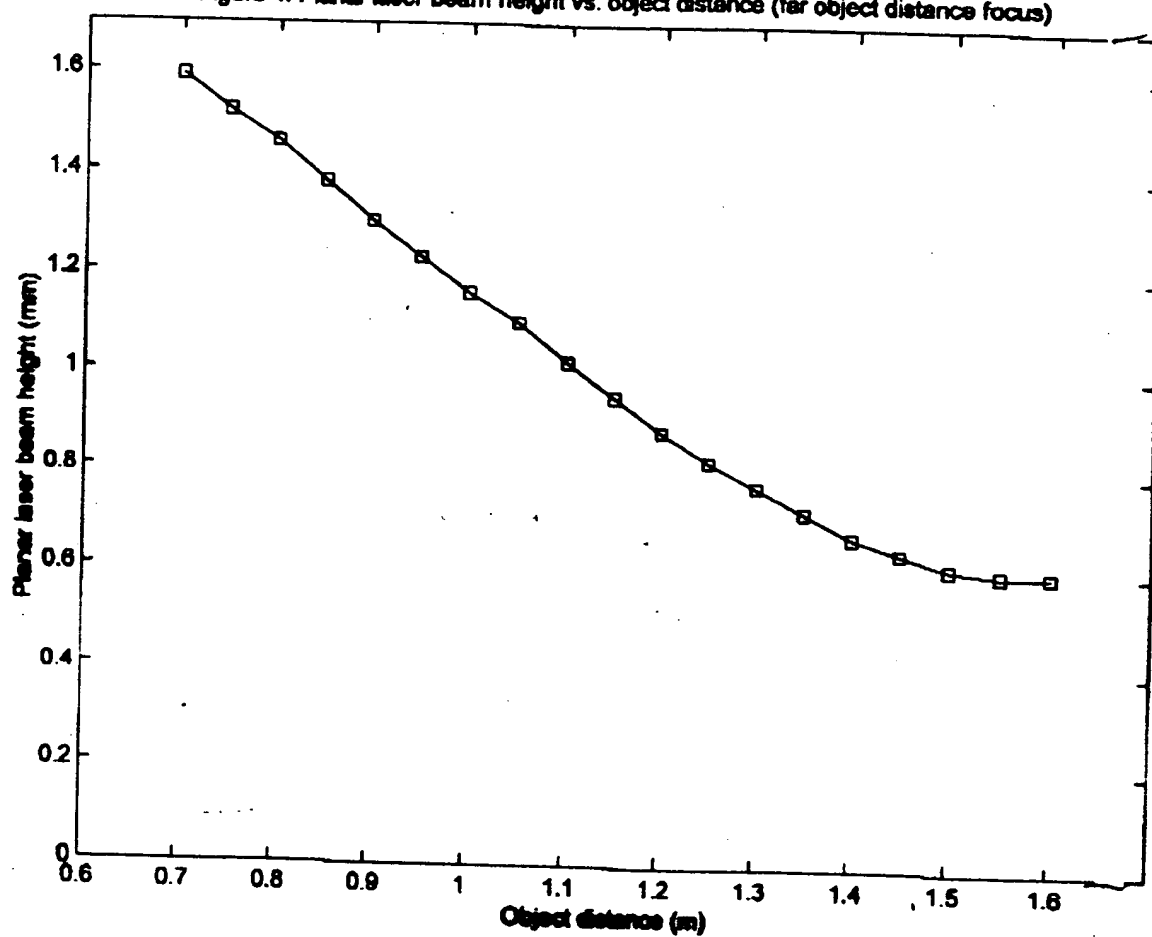


FIG 1M4

25/137

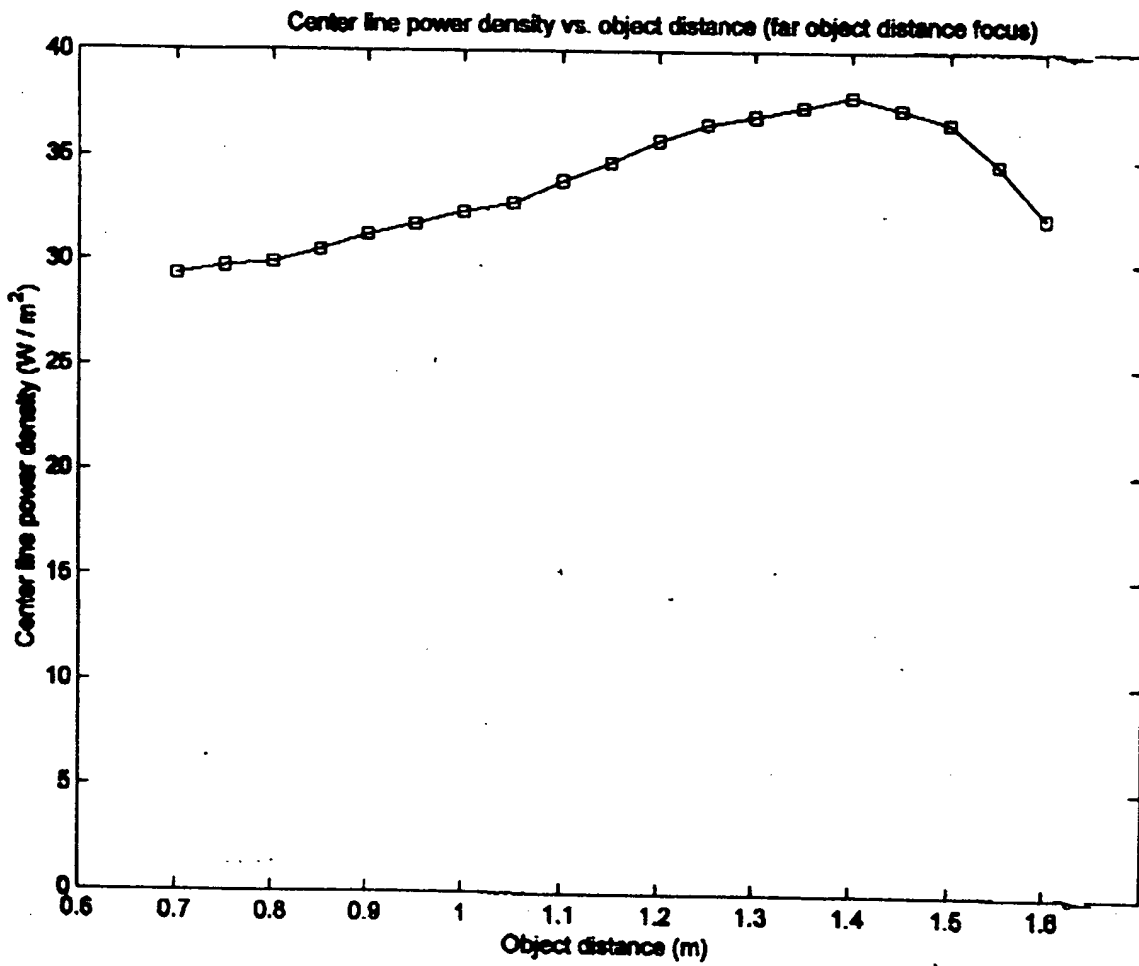


FIG. 1N

26/137

Figure 6: Pixel power densities vs. object distance

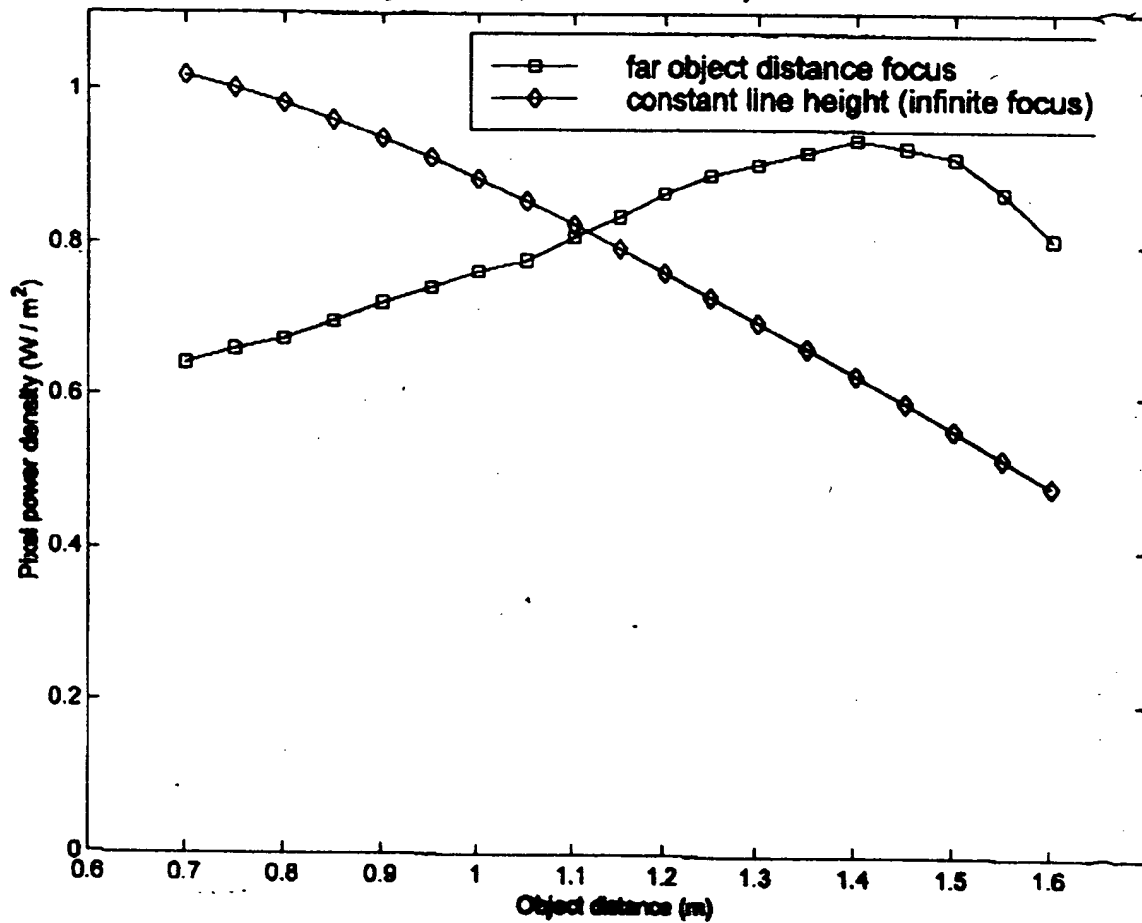


FIG. 10

27/138

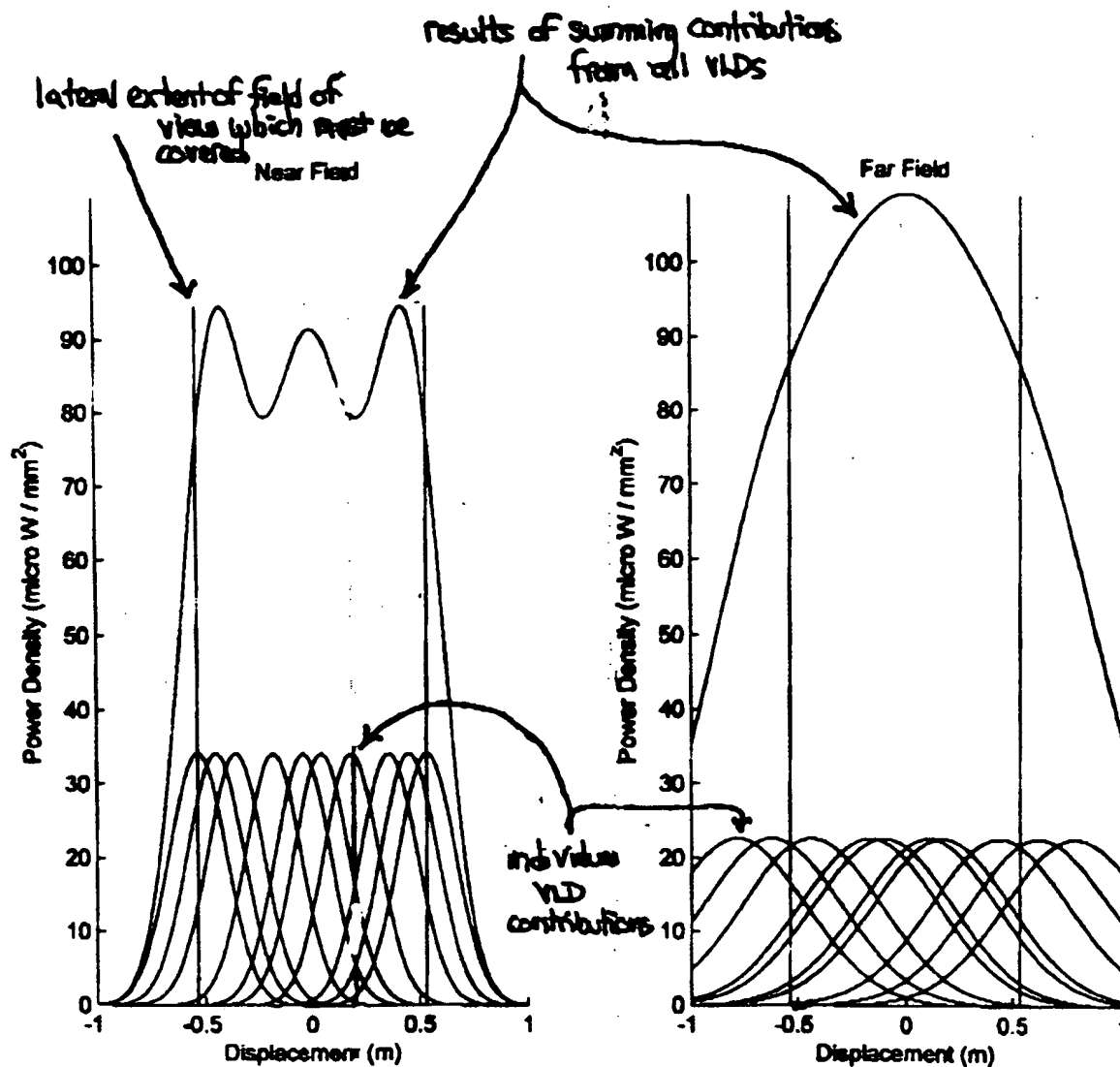


FIG 1P1

FIG 1P2

20/137

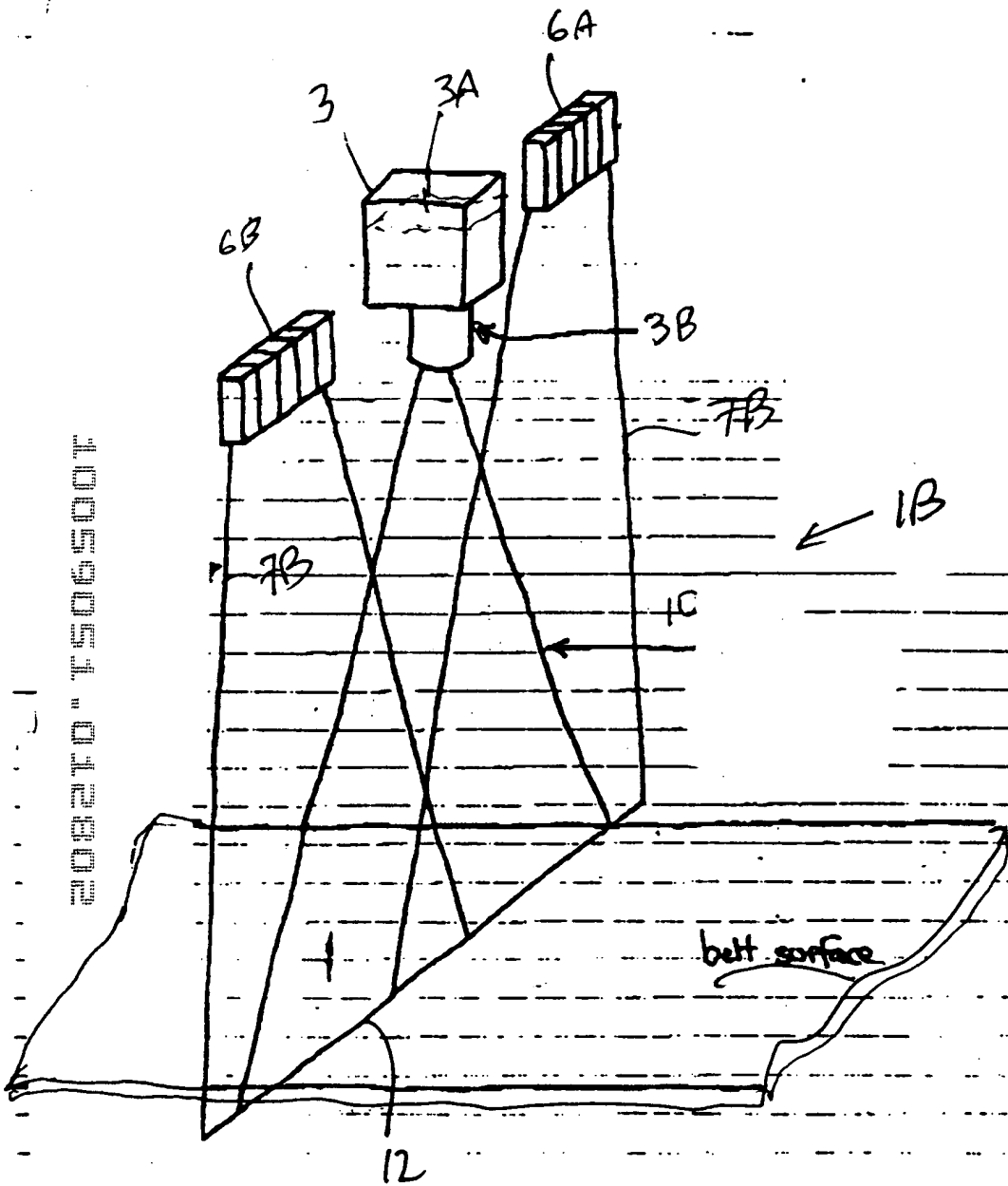


FIG. 101

29/137

Fixed focal length / Fixed focal Distance

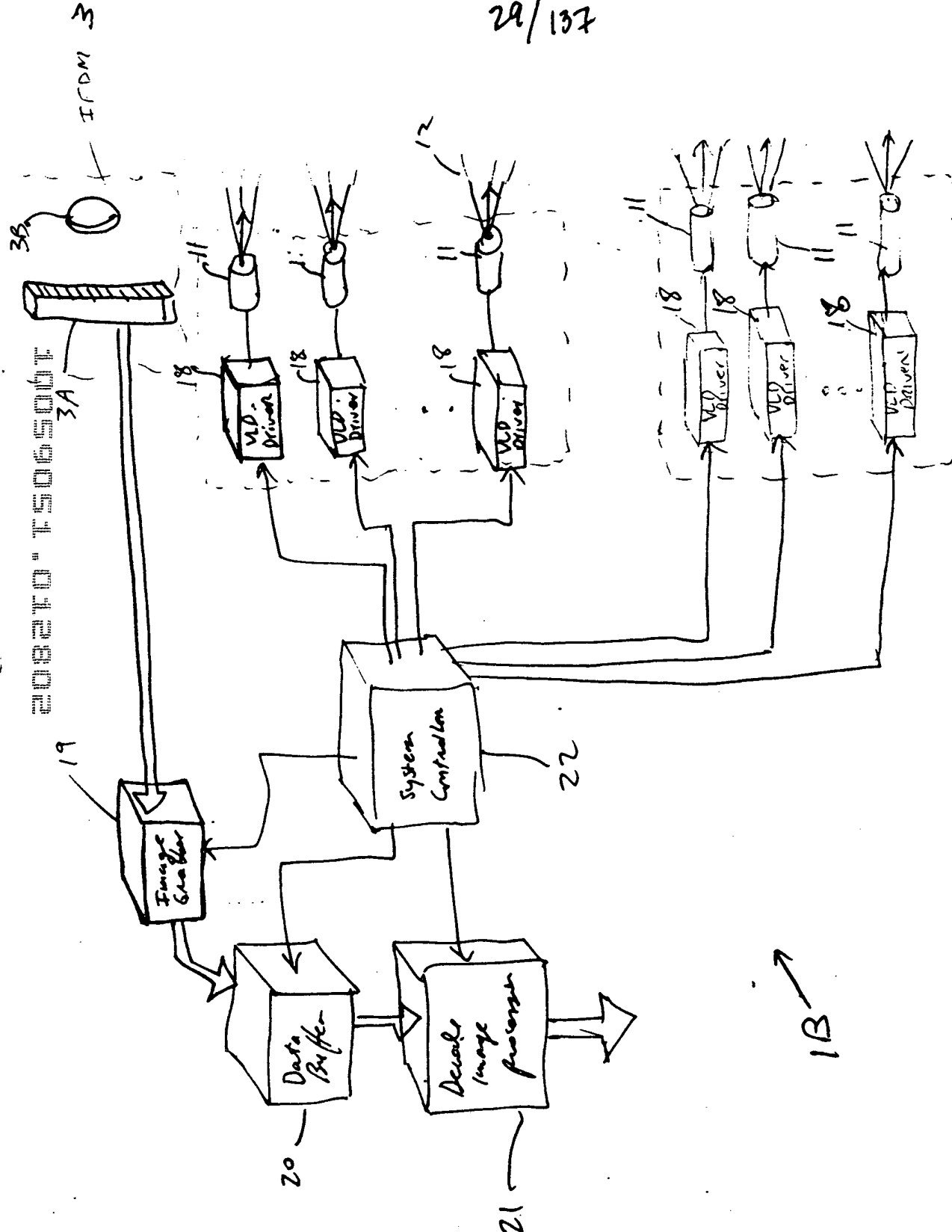
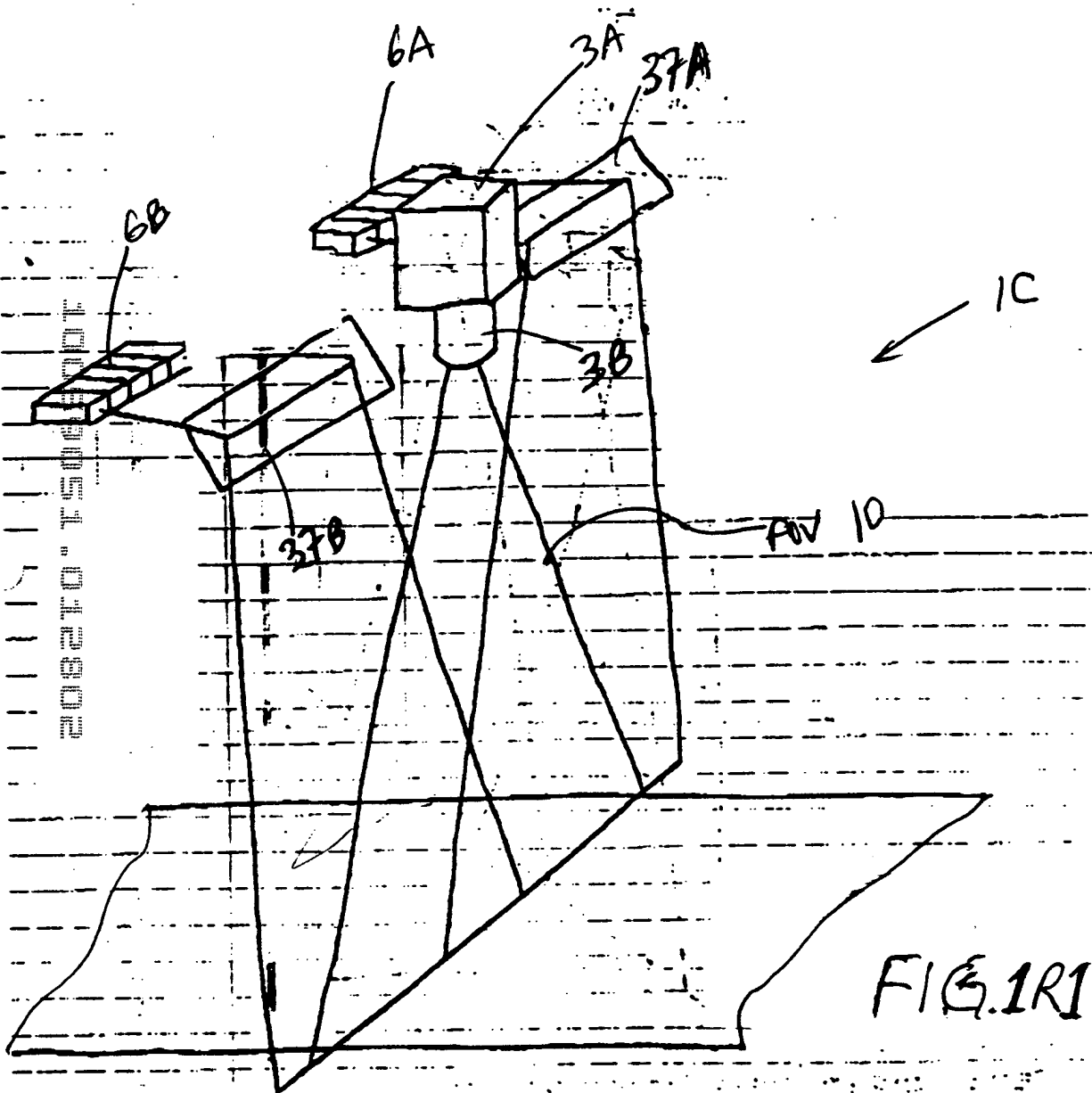


FIG. 1Q2

30/137



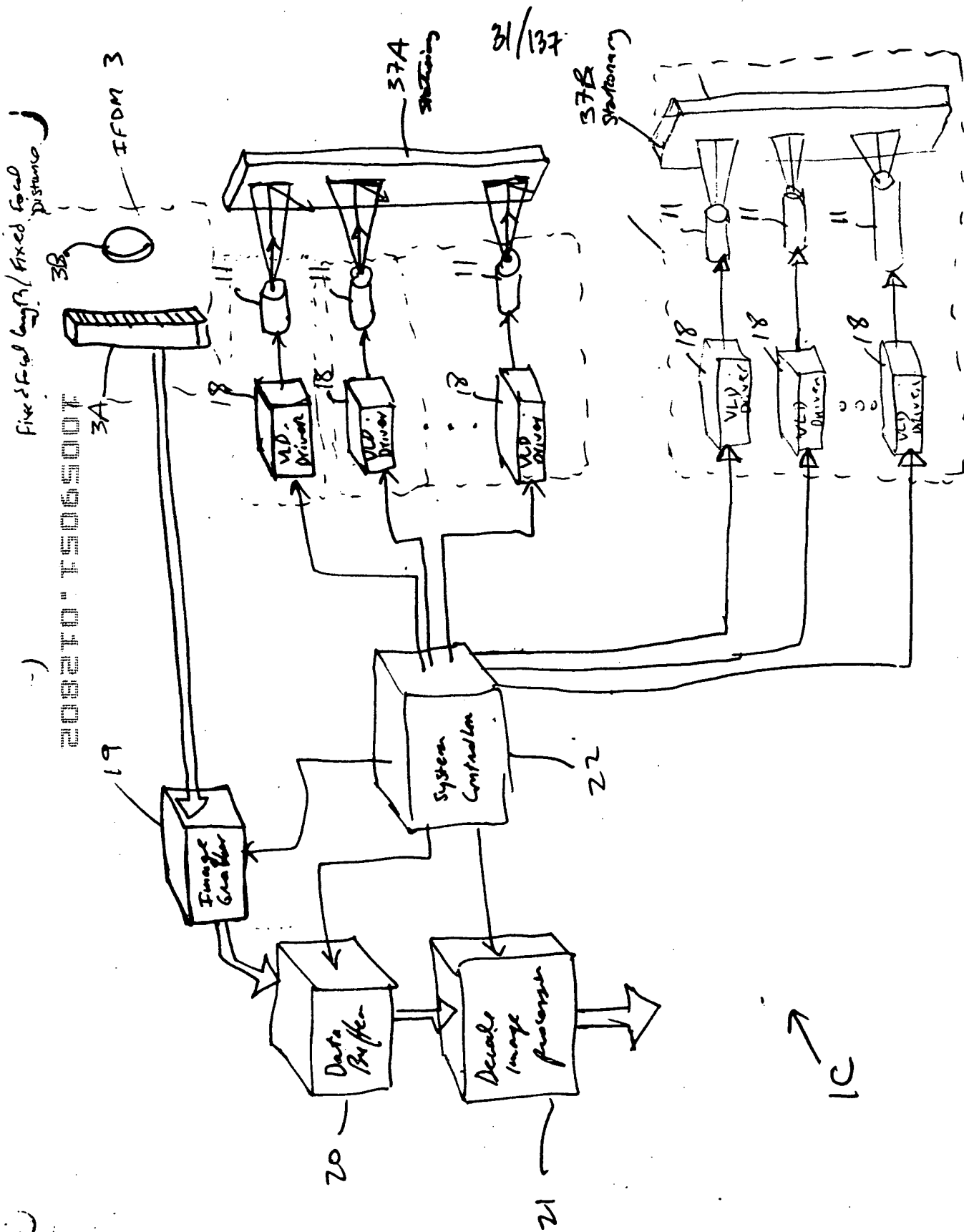


FIG. 1R2

32/137

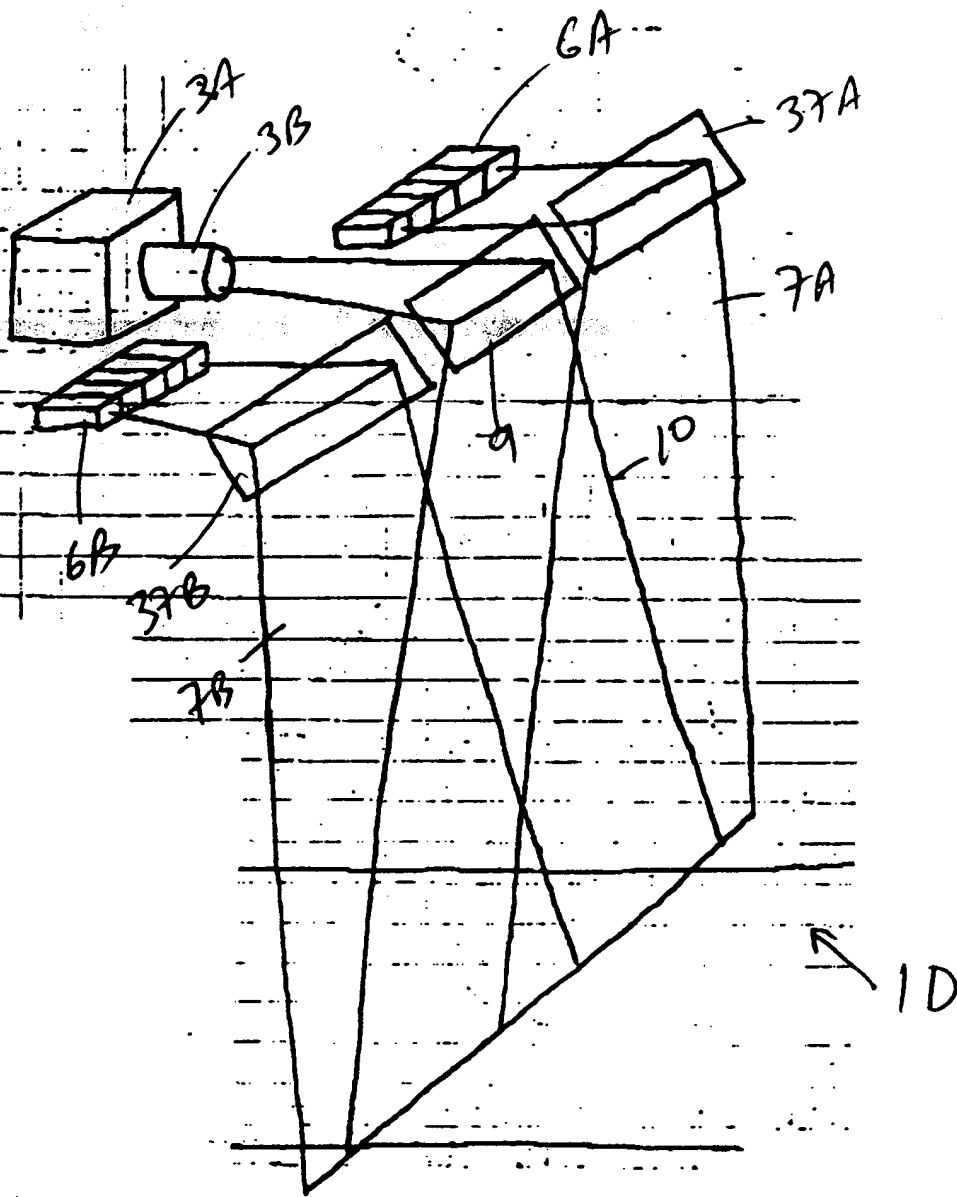
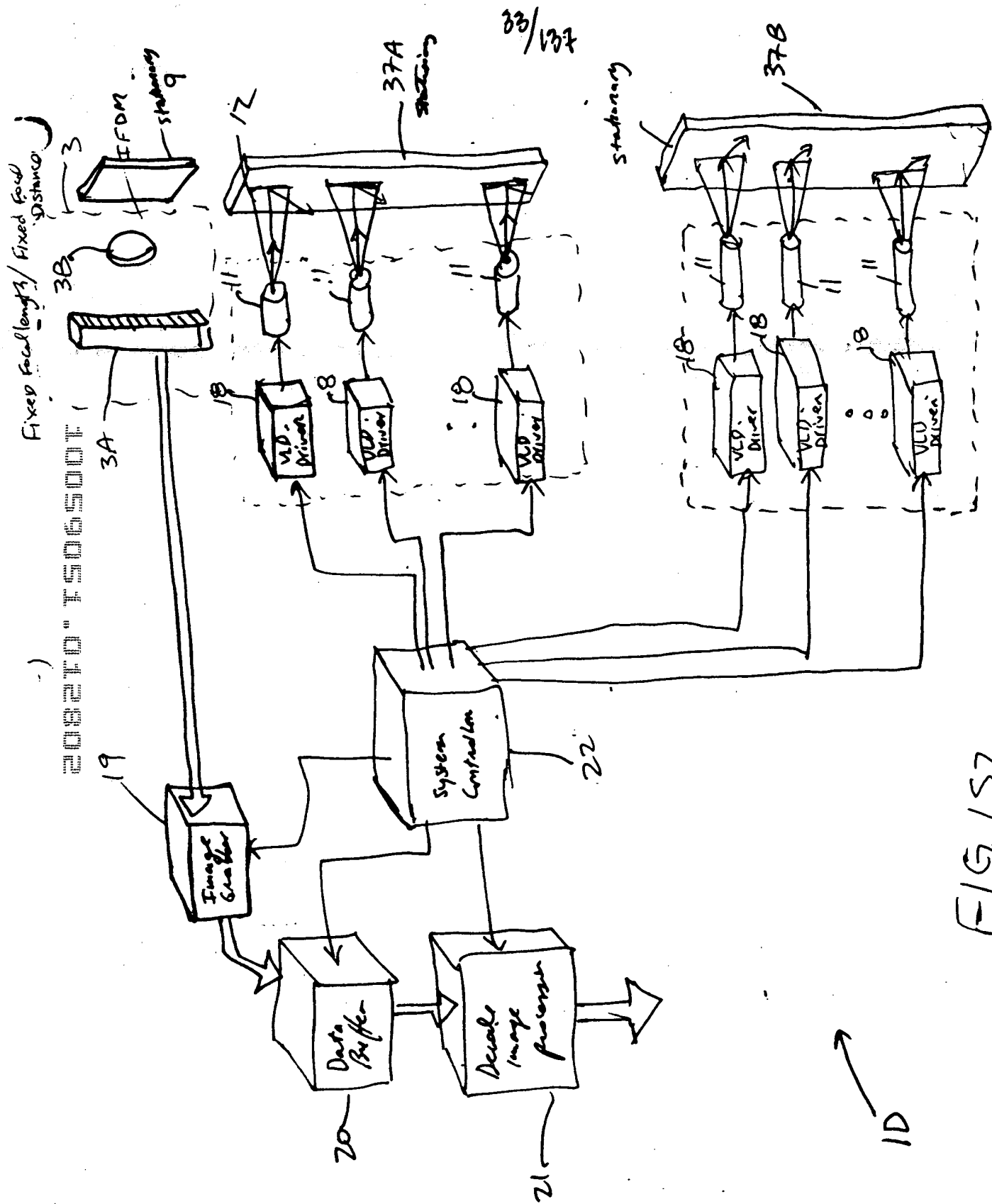


FIG. 151



34/137

208270" T506500T

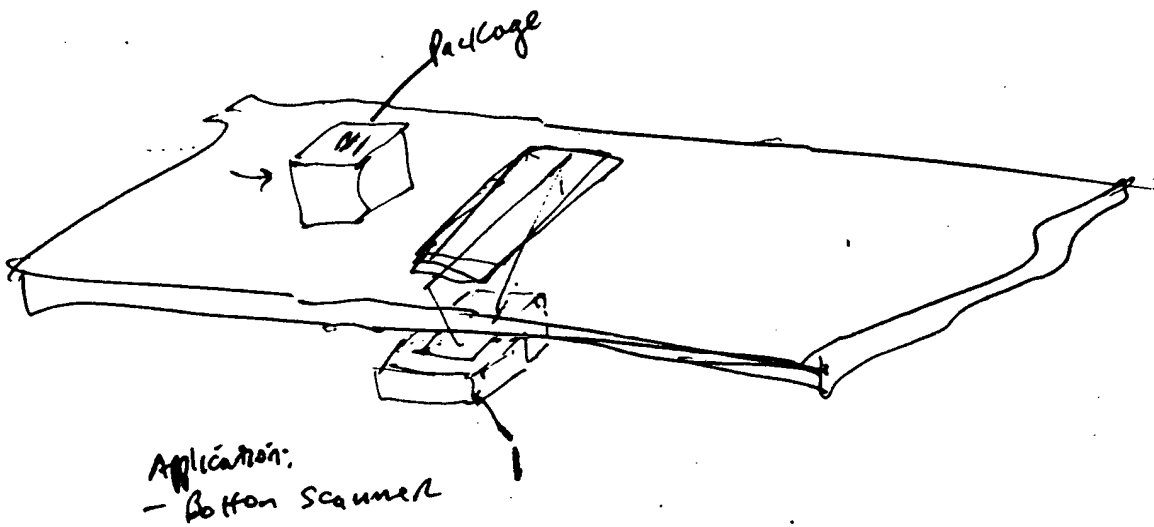


FIG 1T

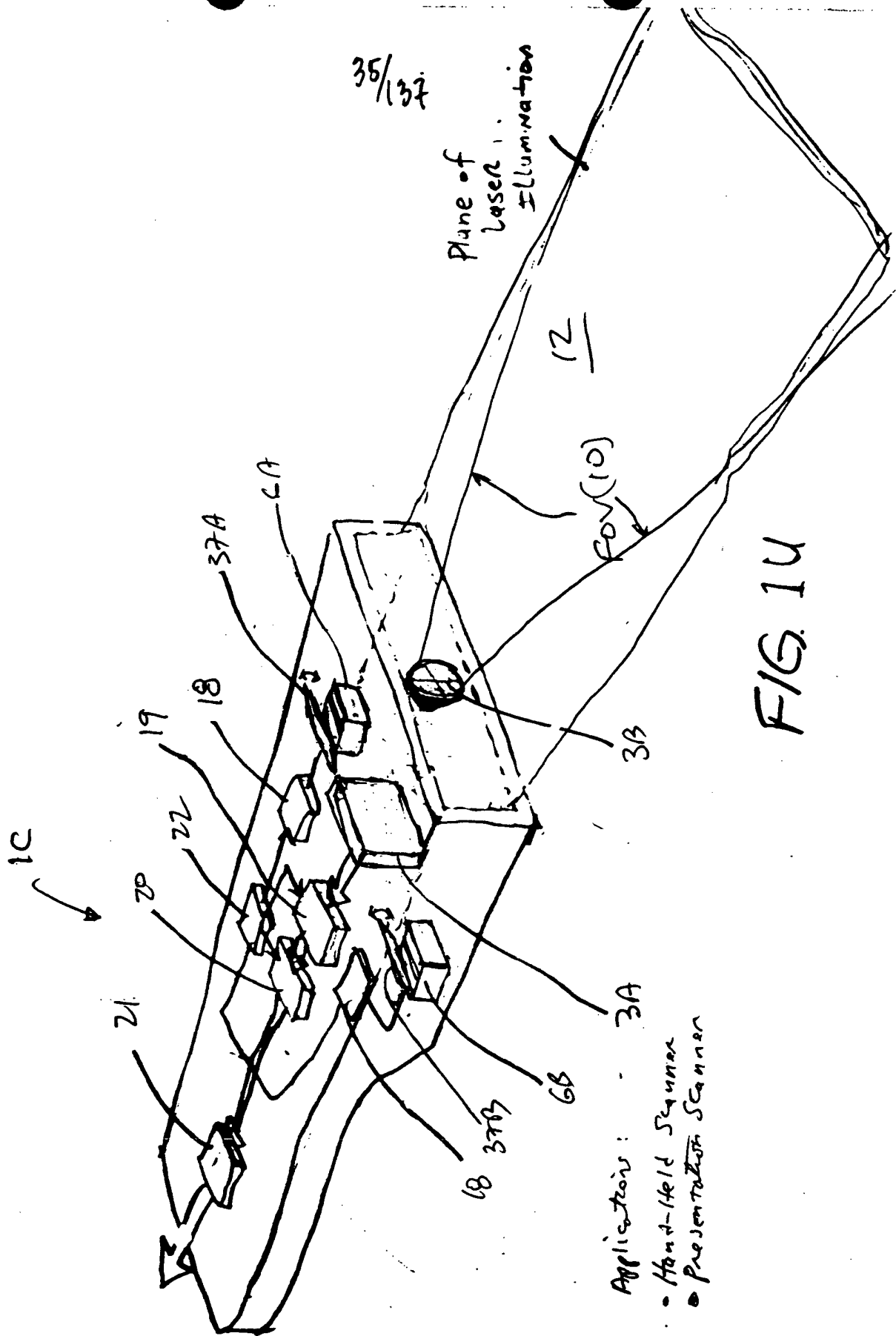


FIG. 1U

- Applications:
- Hand-Held Scanner
 - Presentation Scanner

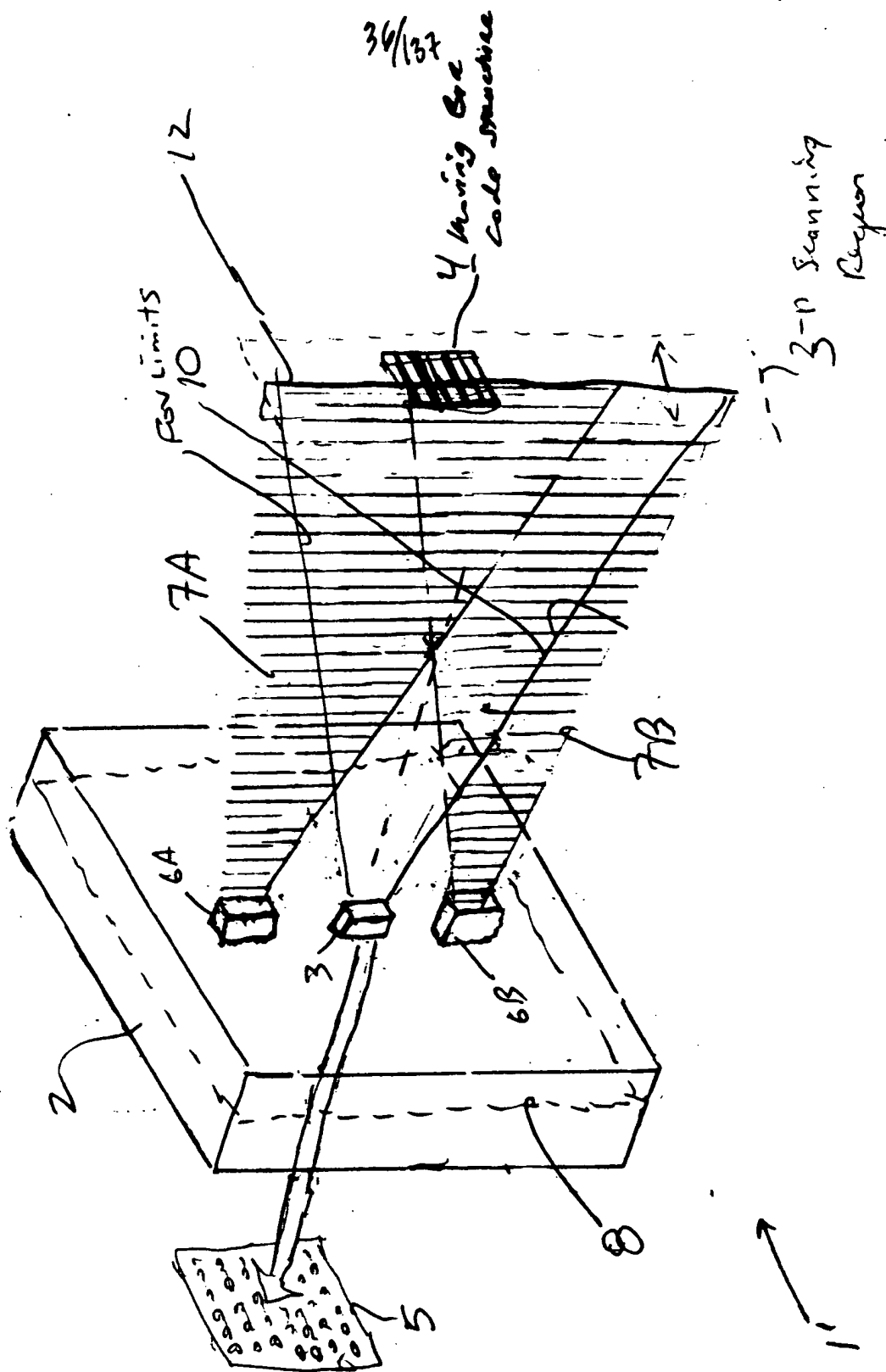


FIG. IVI

32/137

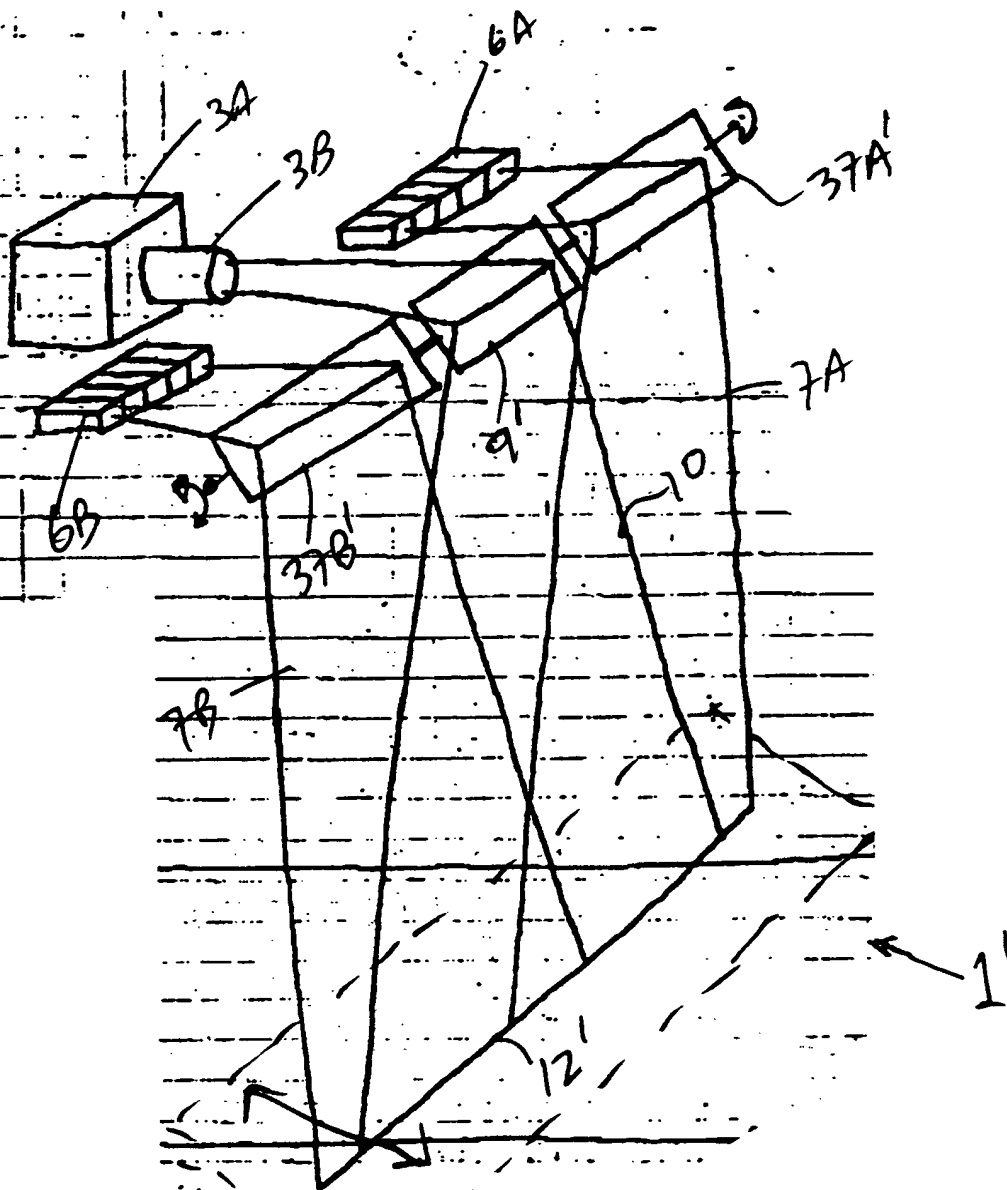


FIG. IV2

2-D
region
of
space

Fixed focal length / fixed focal distance

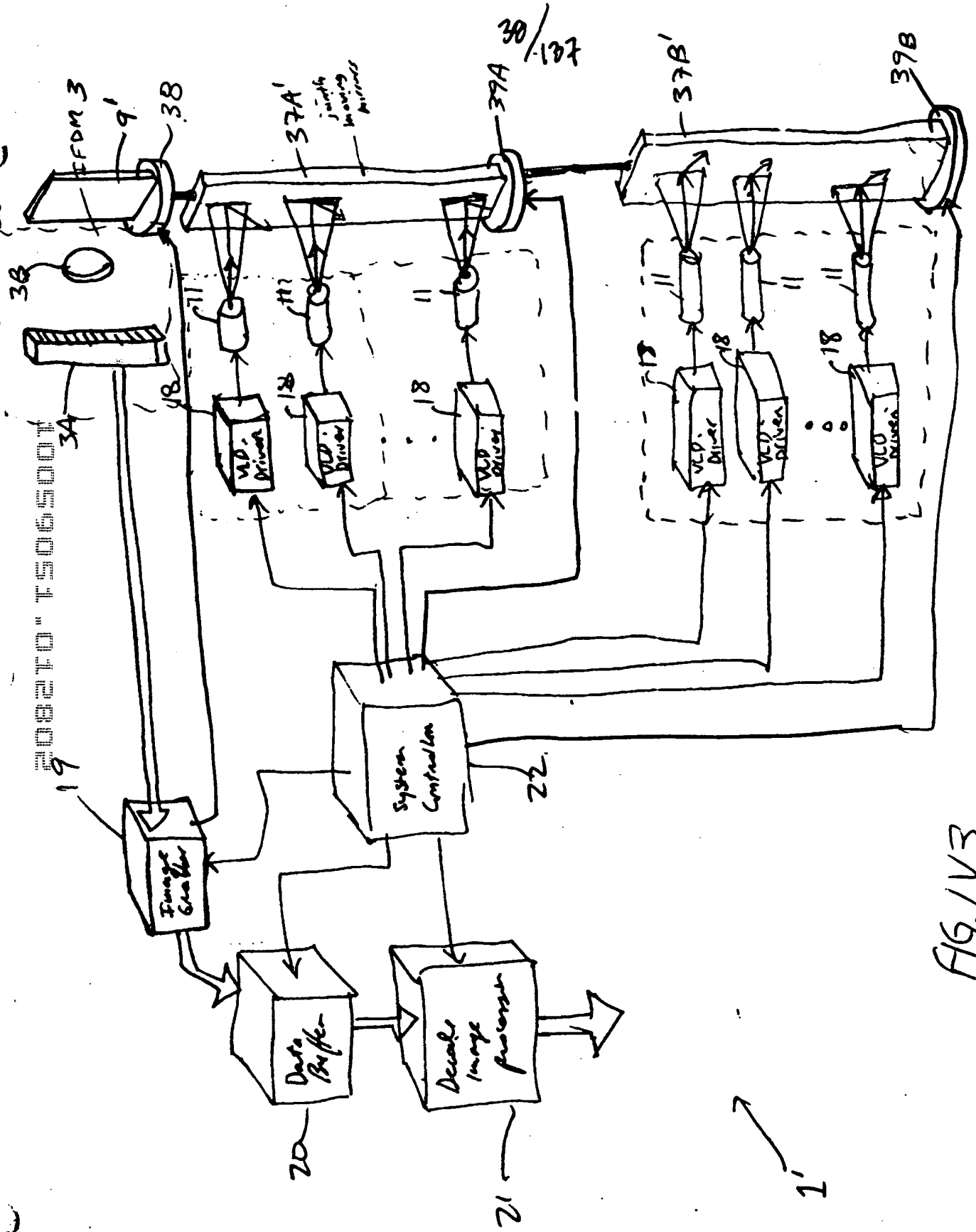
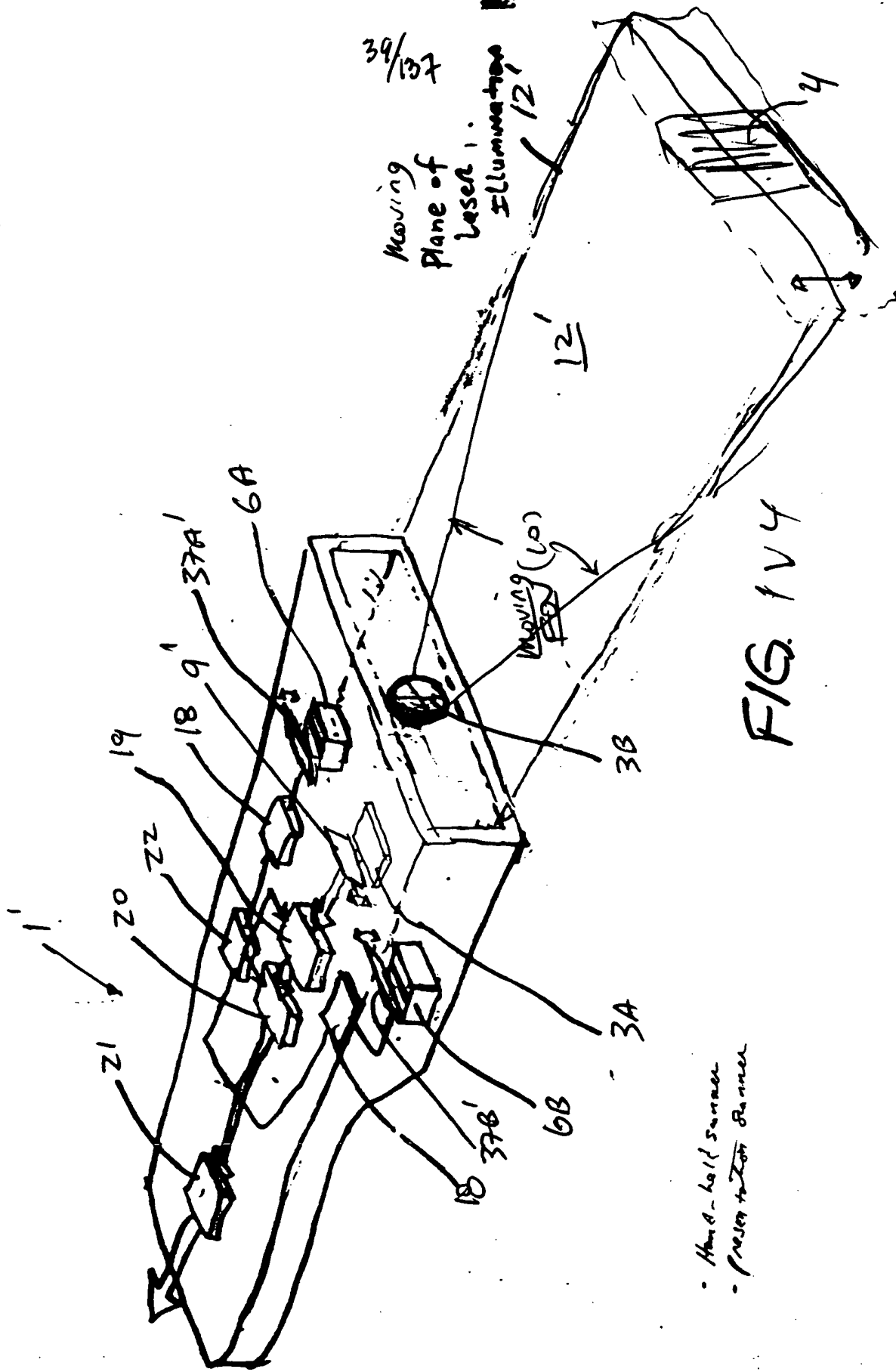
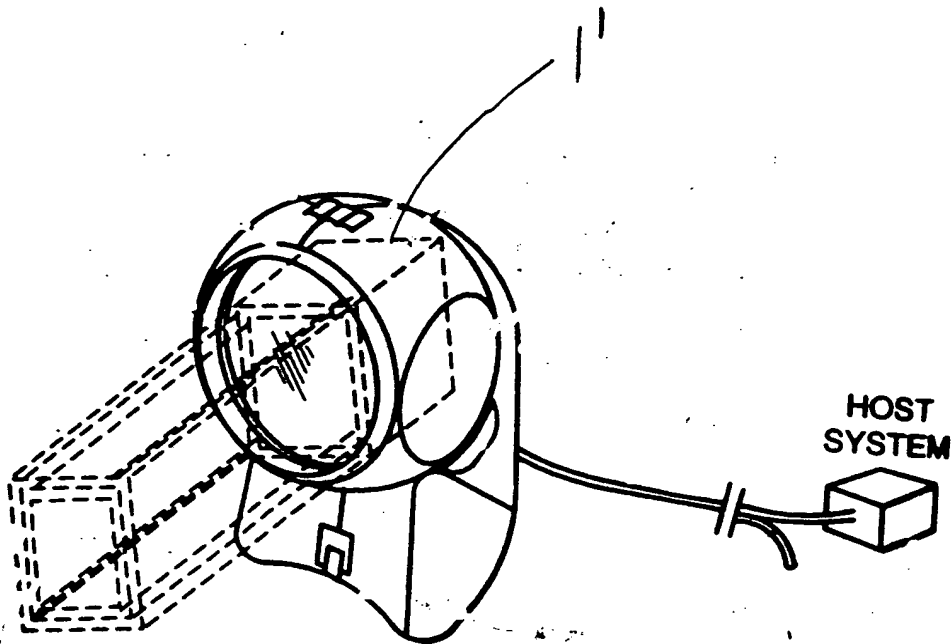


FIG. 1V3



40/137

208270" T506500T



(Presentation type scanner)

FIG. 1V5

208210" T506500T

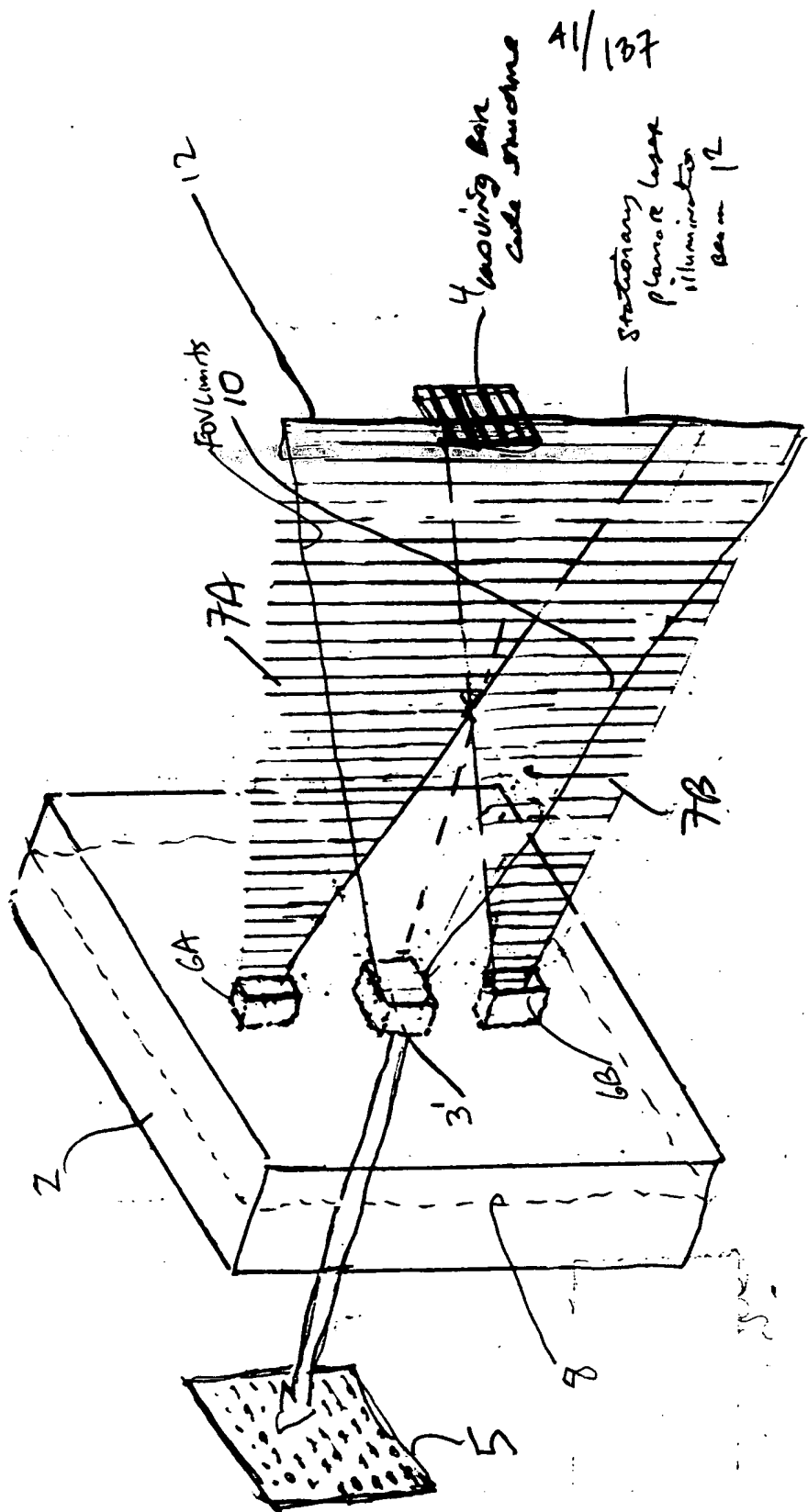


FIG. 2A

42/137

208213 T506500T

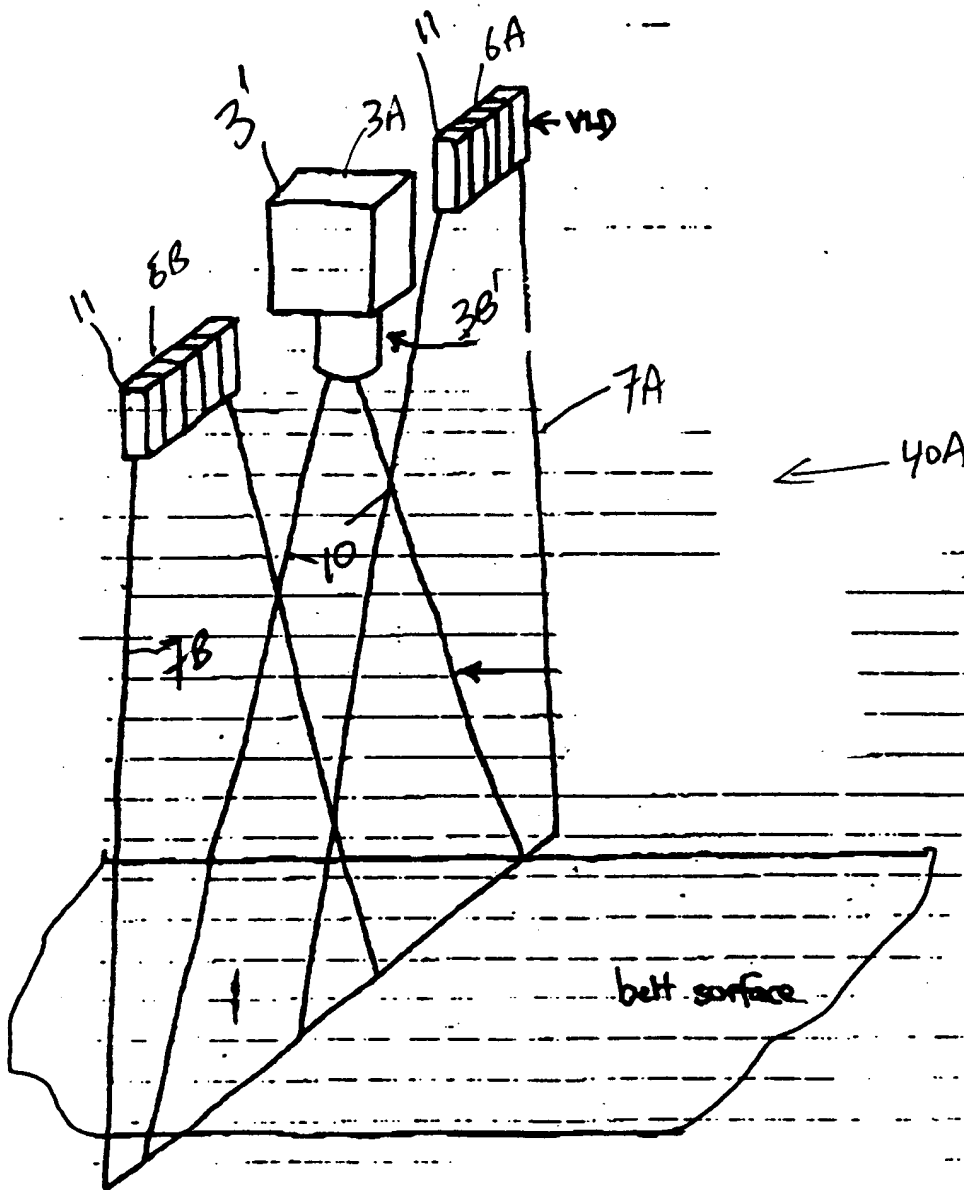


FIG. 2 B1

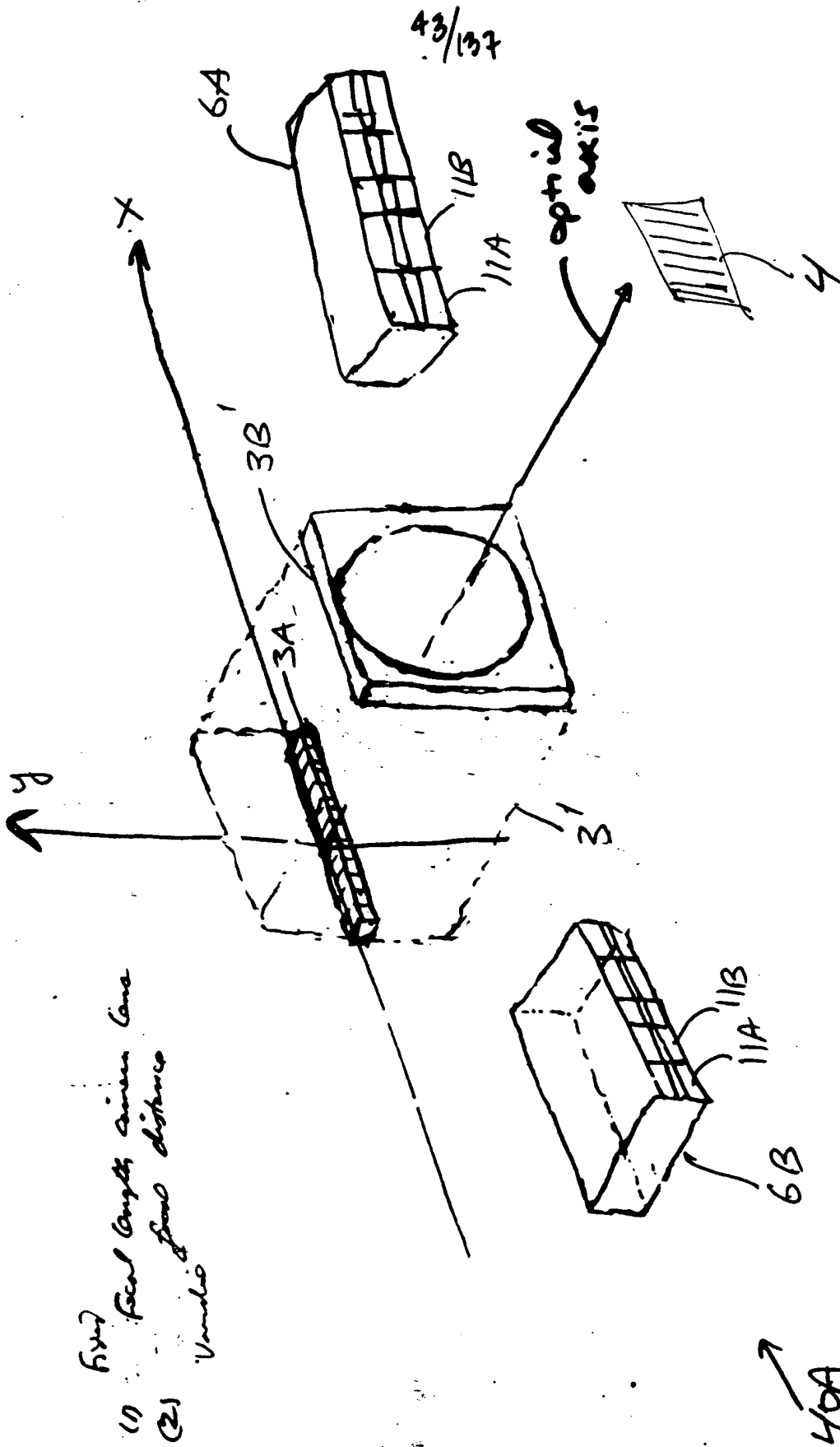


FIG. 2B2

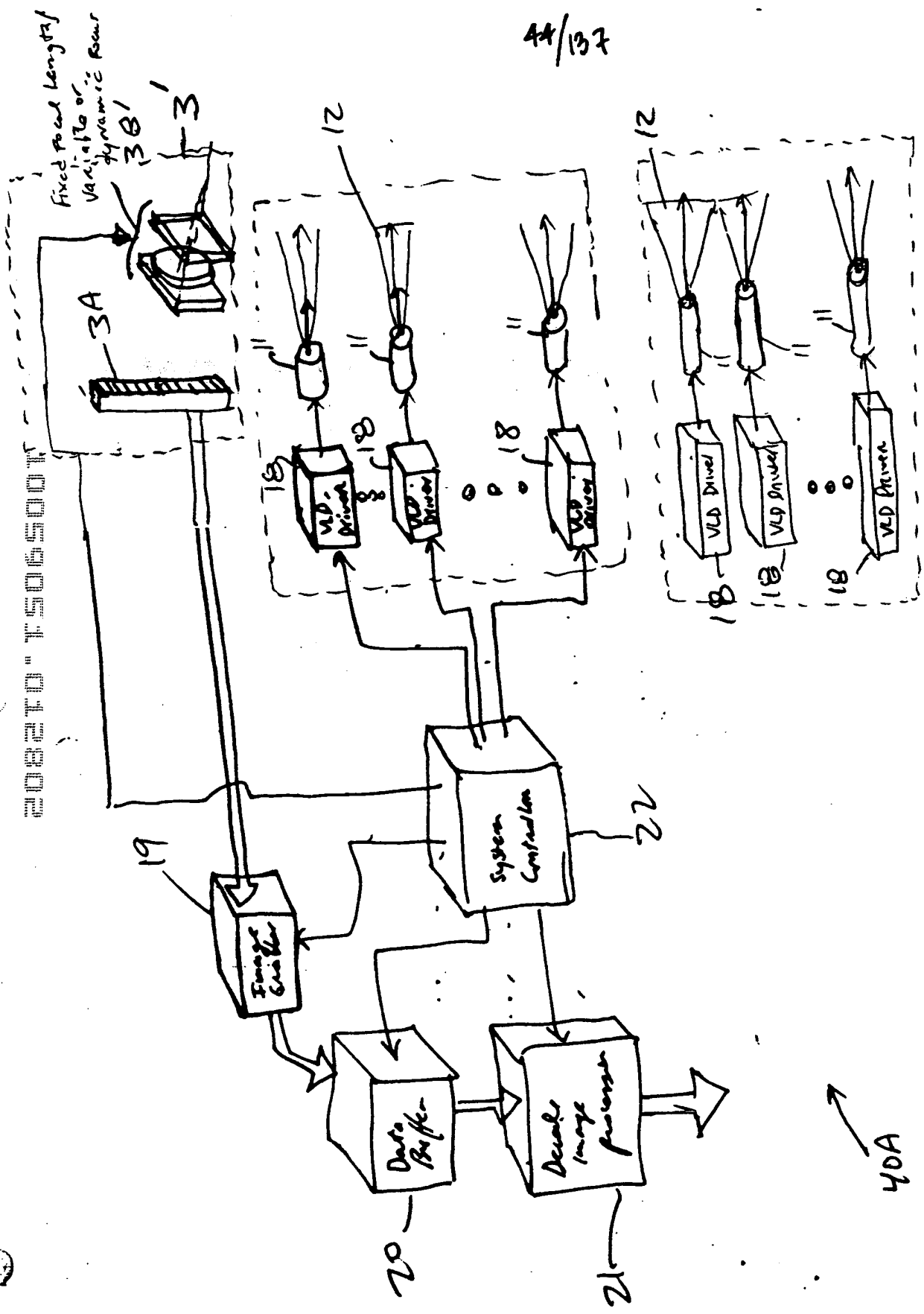


FIG. 2C1

208270" F506500F

45/137

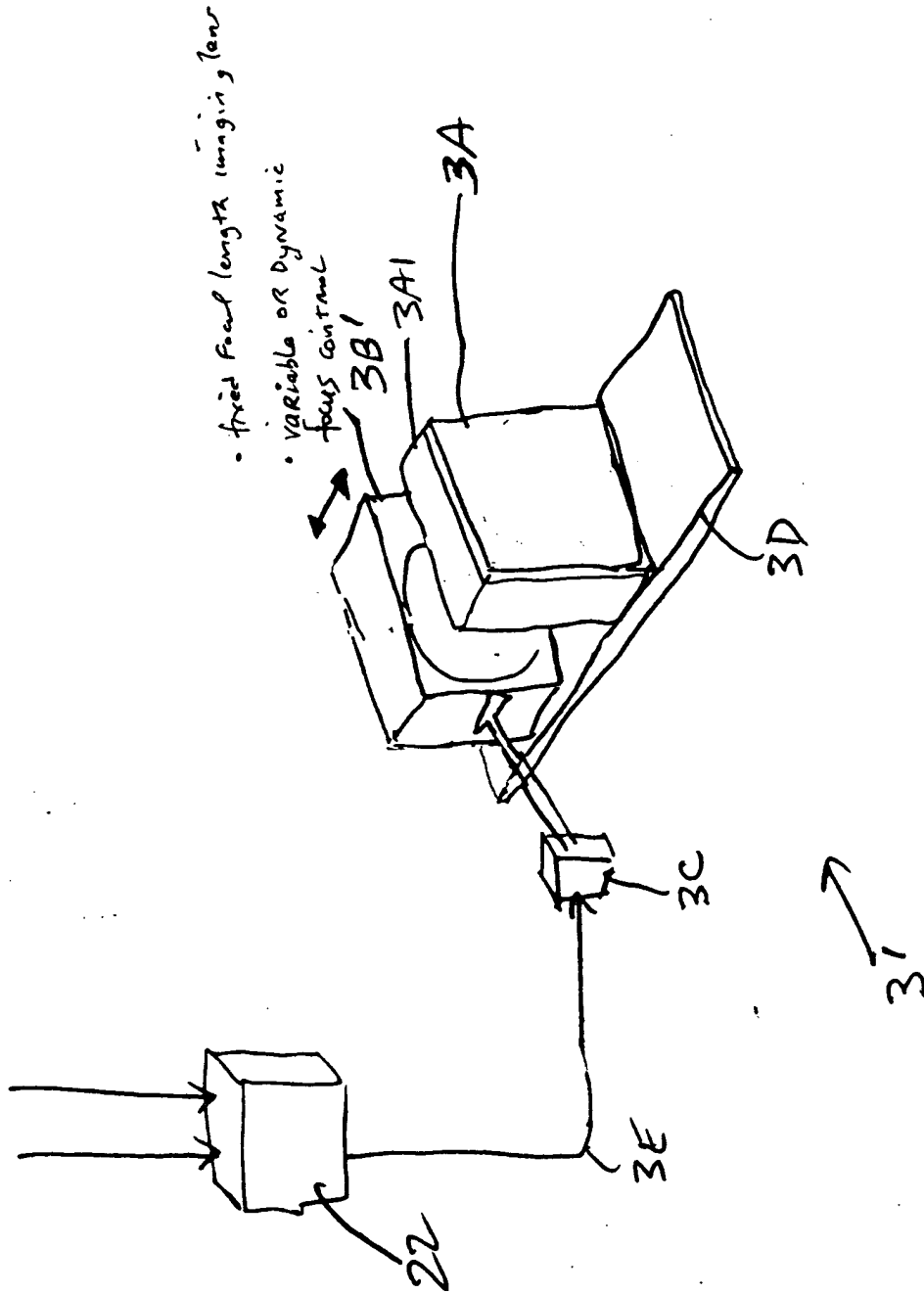


FIG. 2C2

46/138

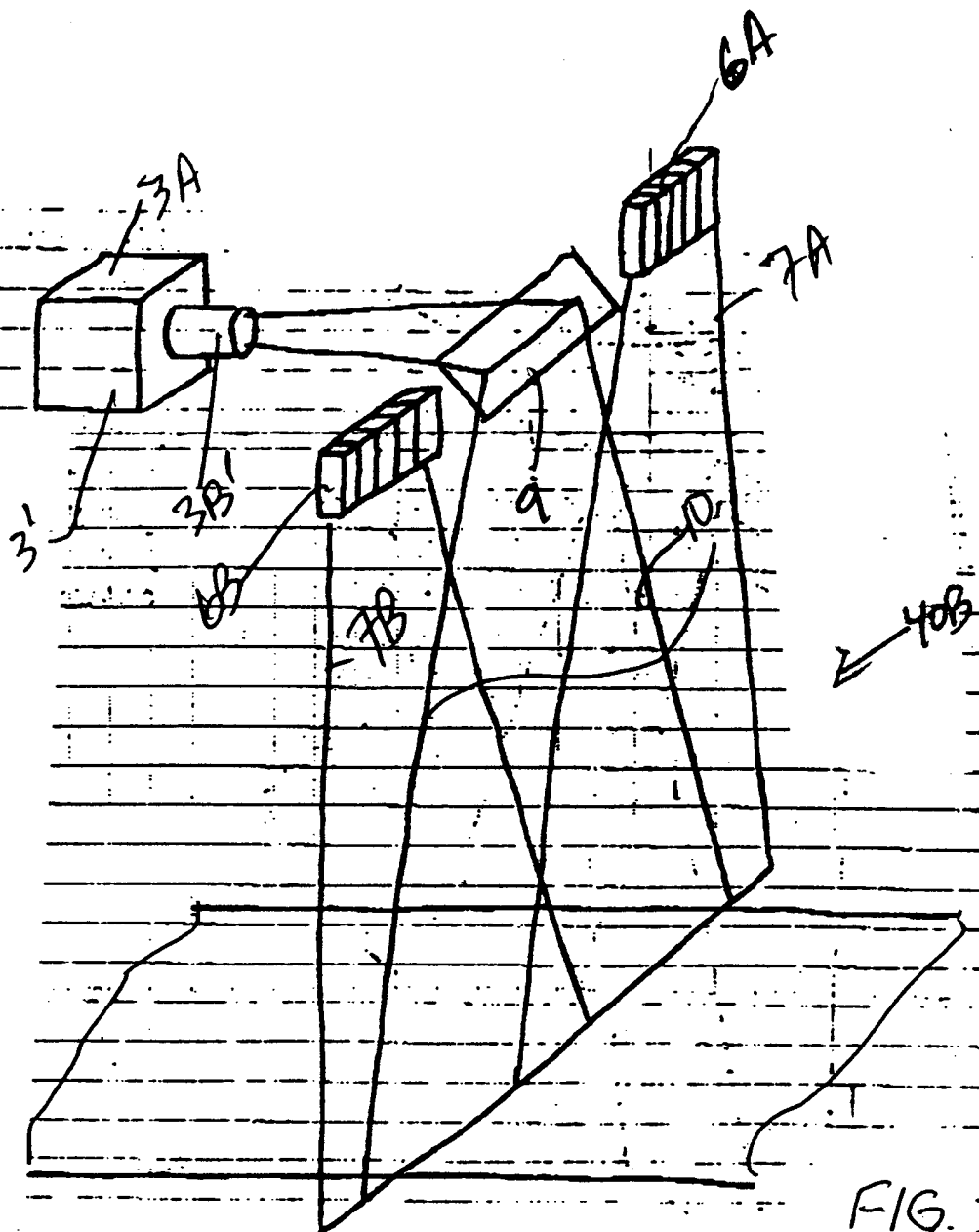


FIG. 2D1

208210" F5063

47/137

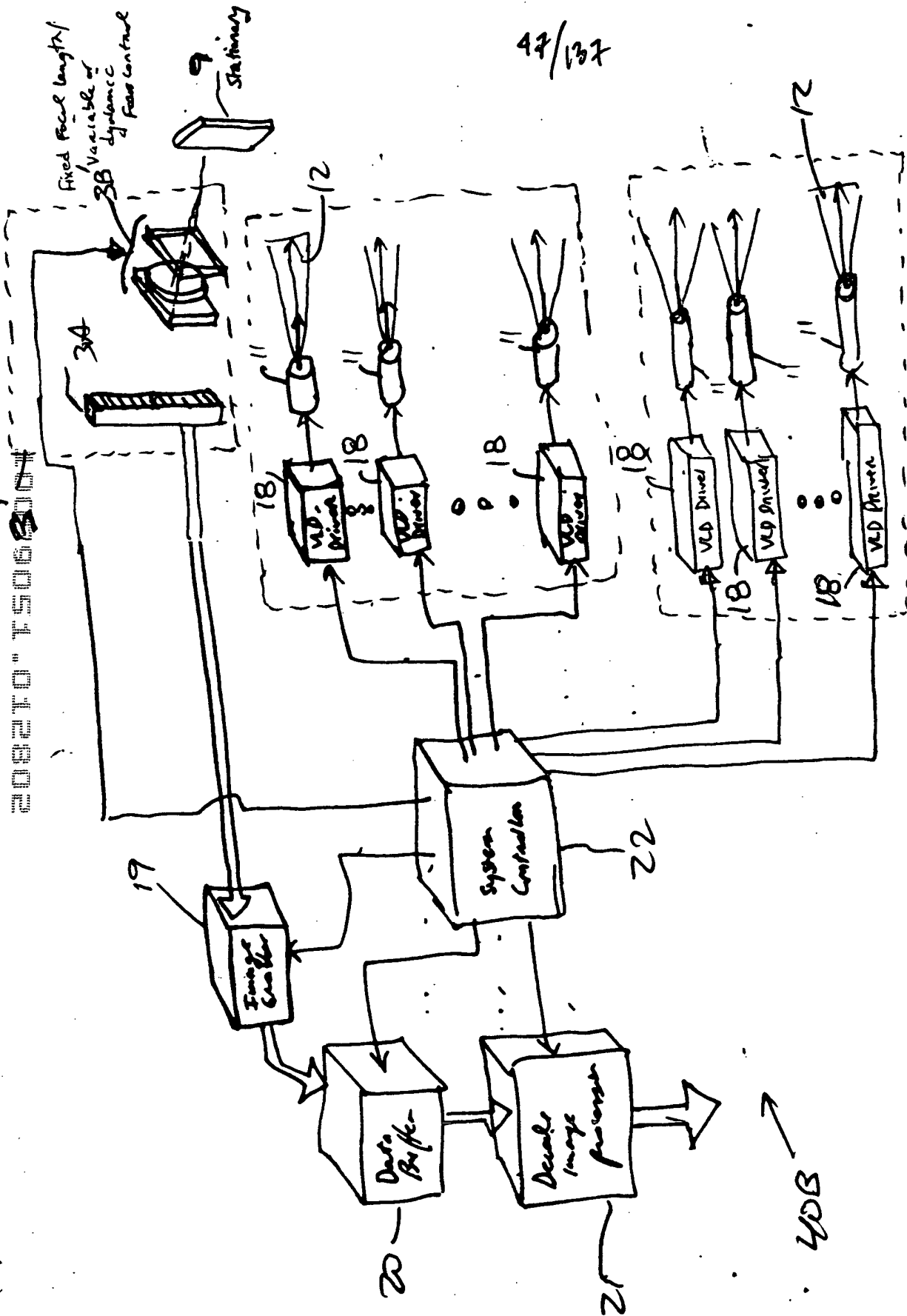


FIG. 2D2



2003210" T506500T

18/137

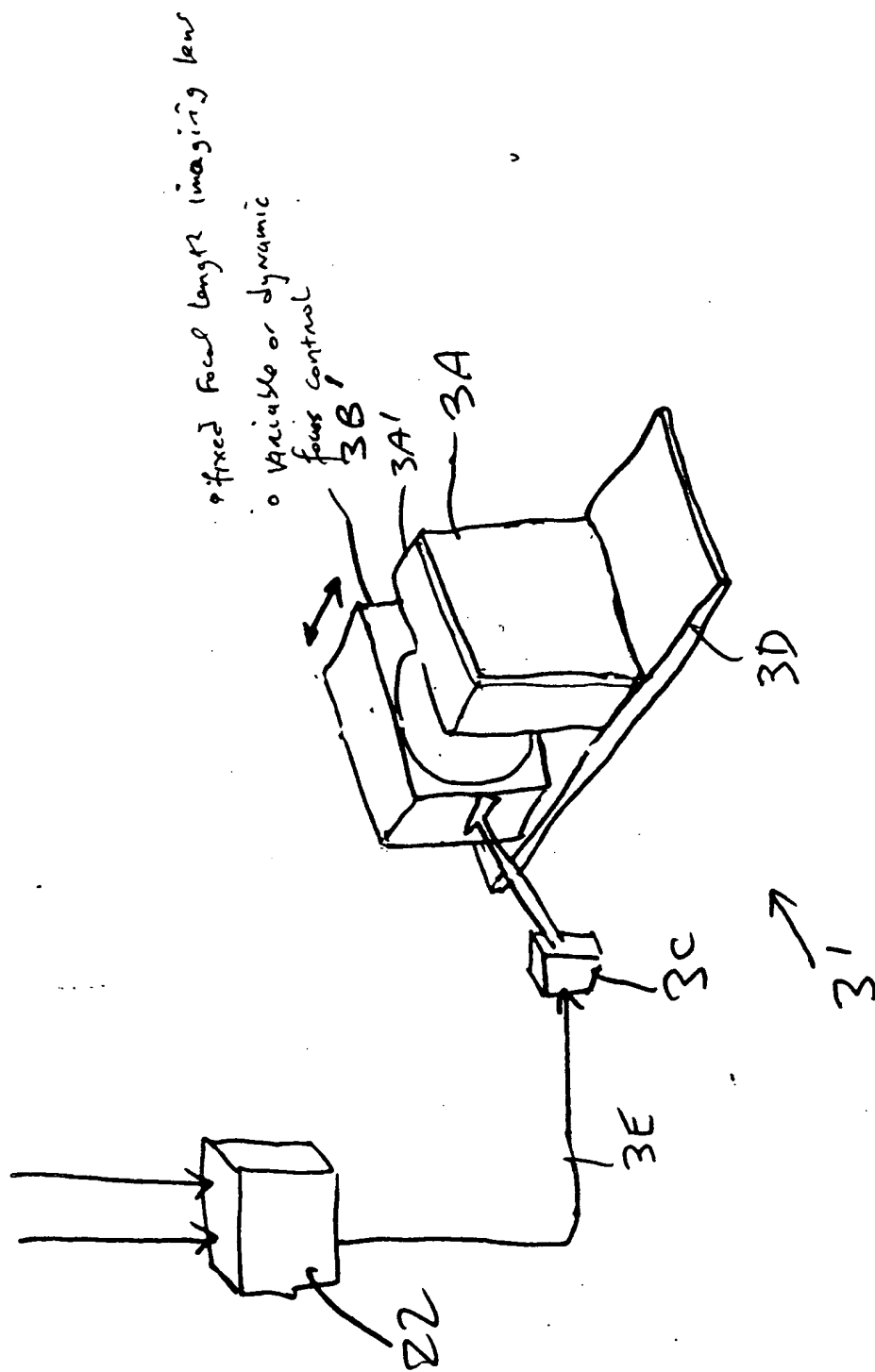


FIG. 2D3

49/137

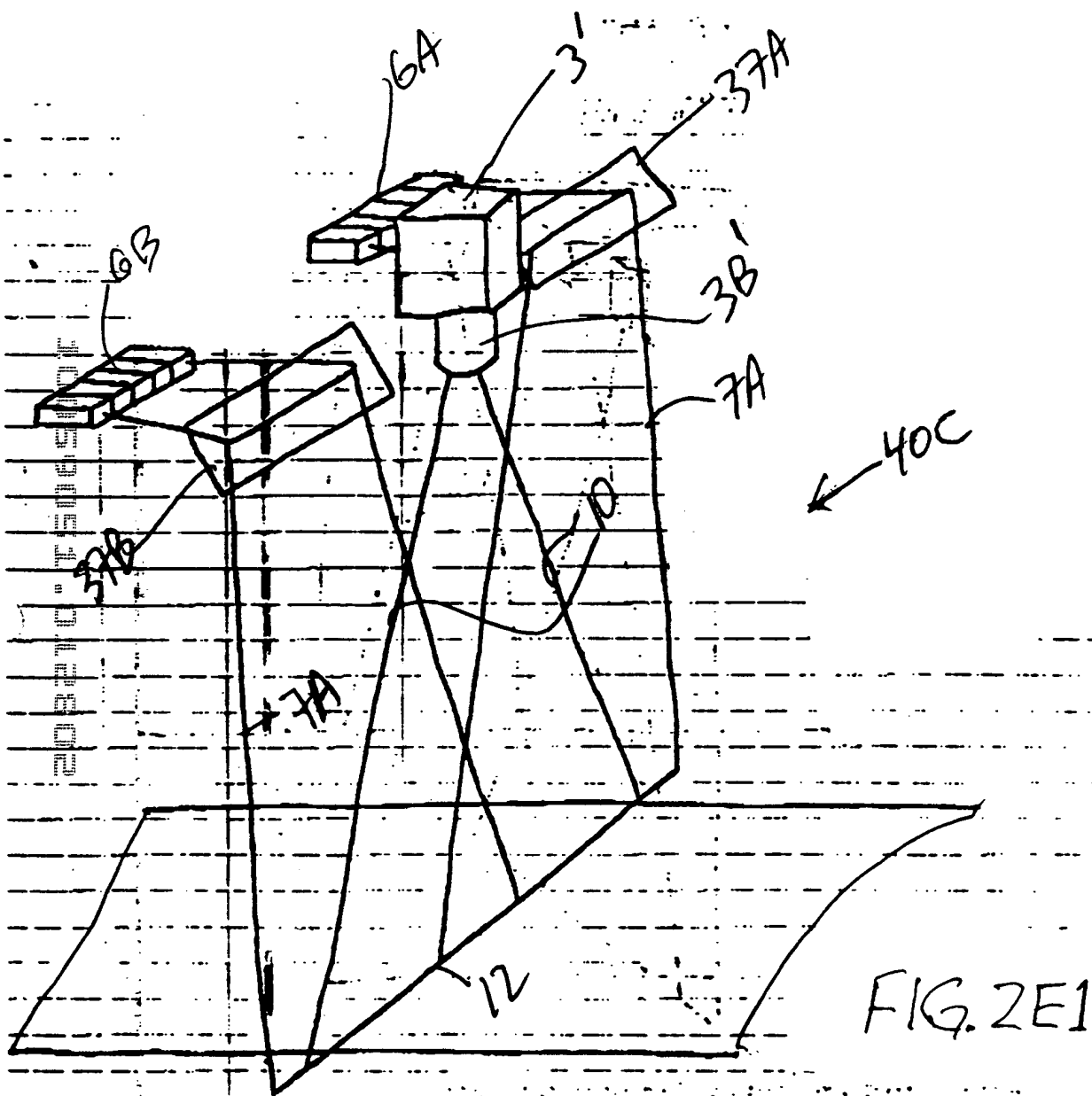


FIG. 2E1

11-10-63 10:10 PM

59/137

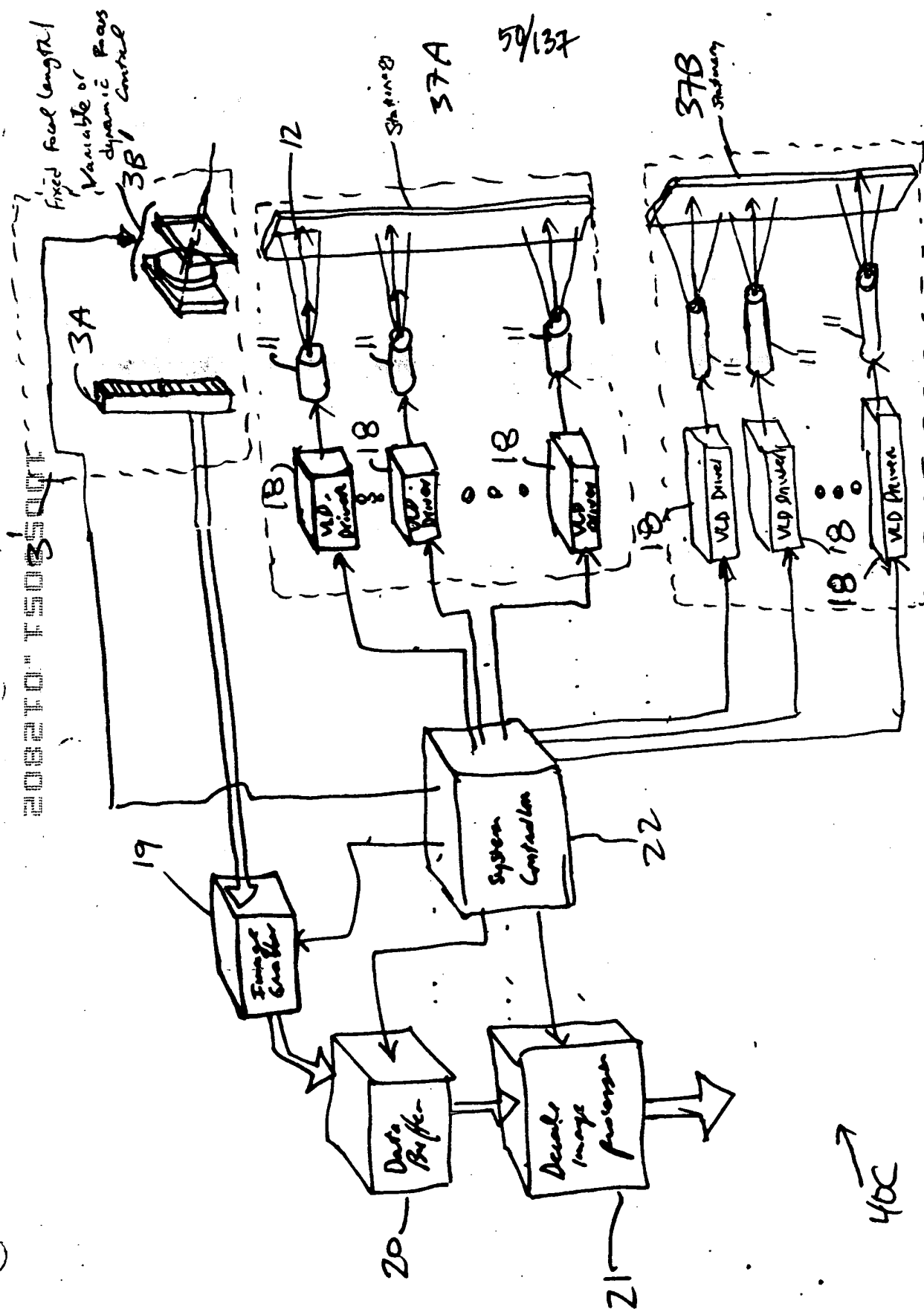


FIG. 2F2

400



- Fixed focal length imaging lens

- o variable or dynamic (uns control)

38-341

3A

MD

U
M

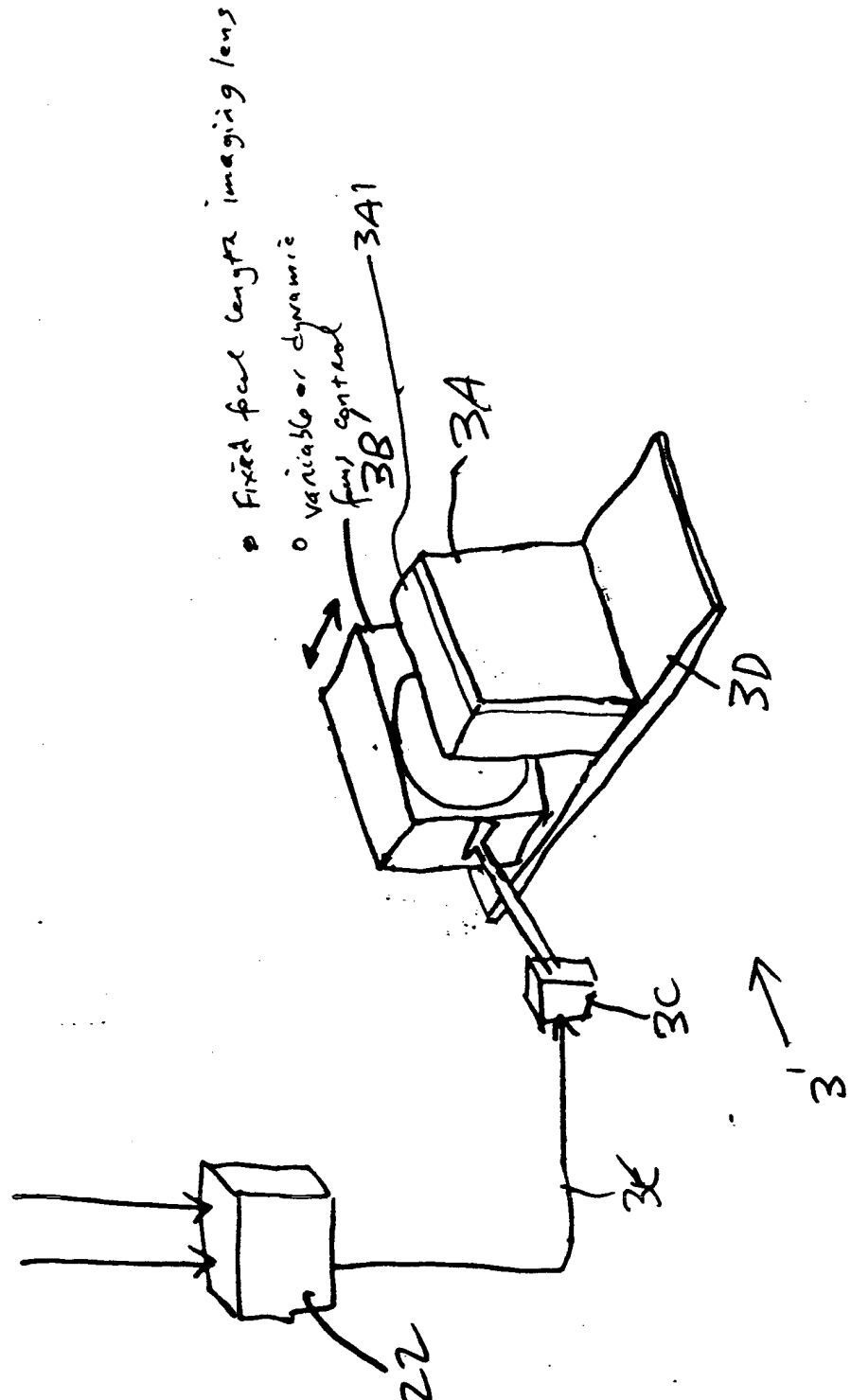
3

22

38

U
M

242
F/G



	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
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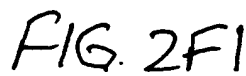


FIG. 2F1

SECRET

53/137

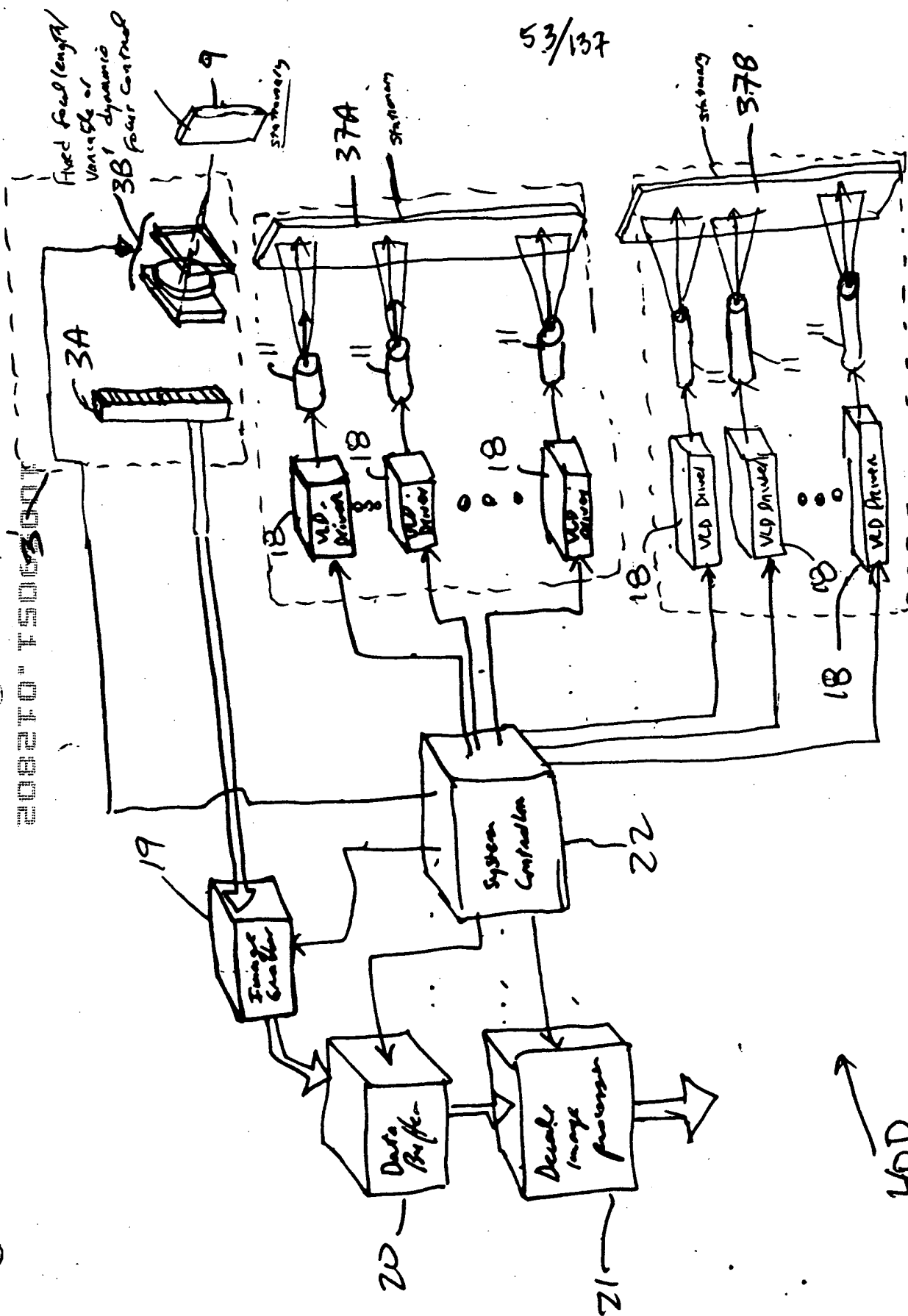


FIG. 2F2

40D

54/137

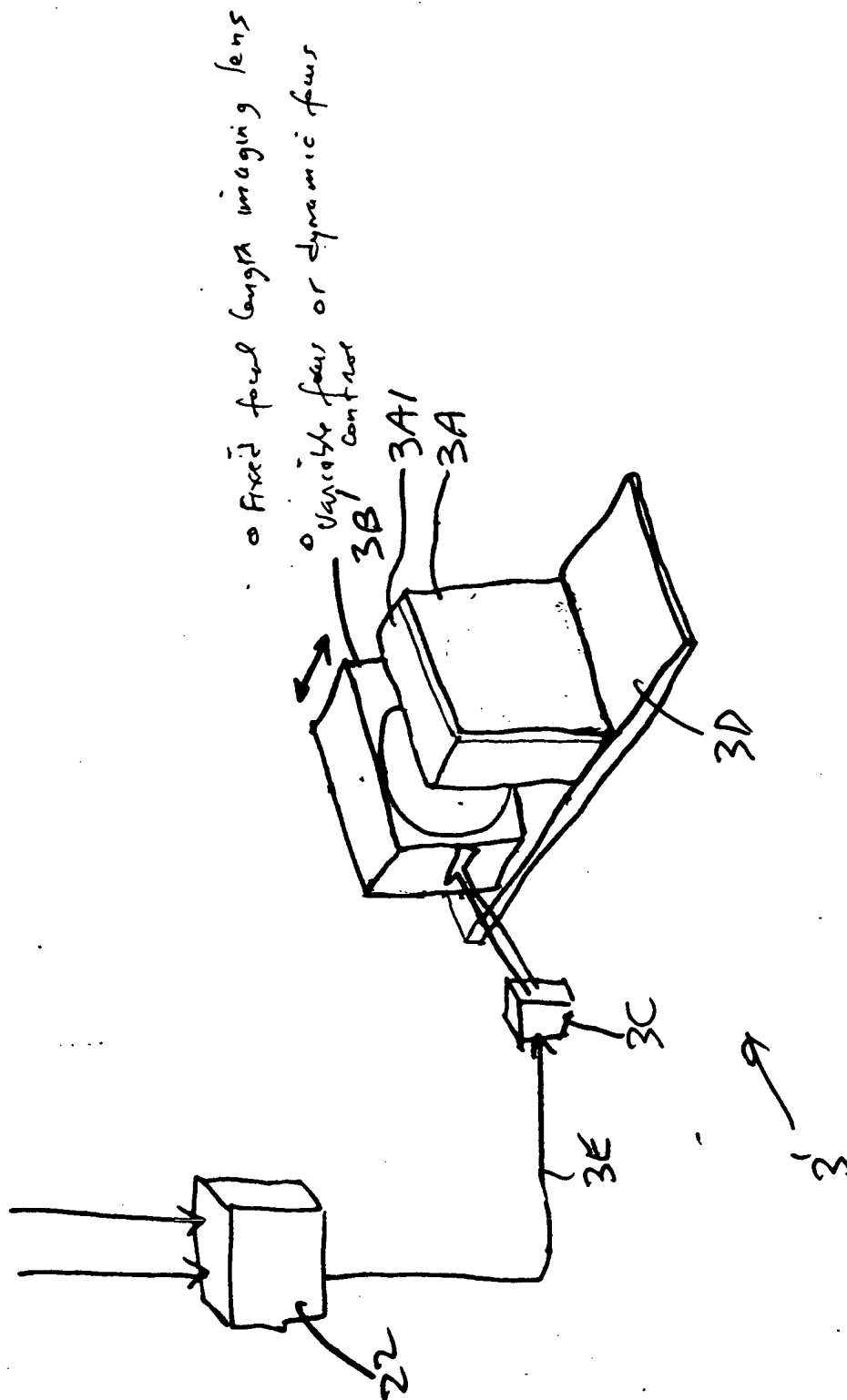


FIG. 2F3

55/137

208270" T506500T

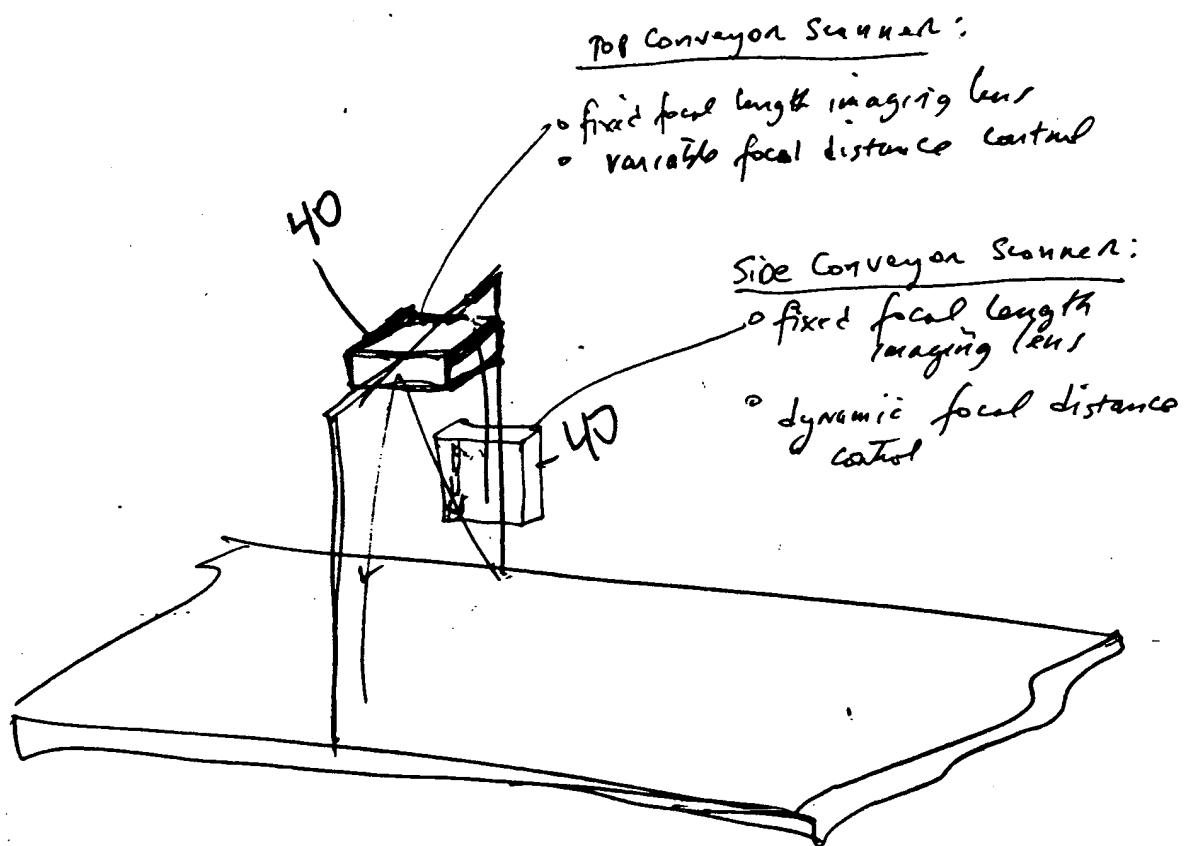
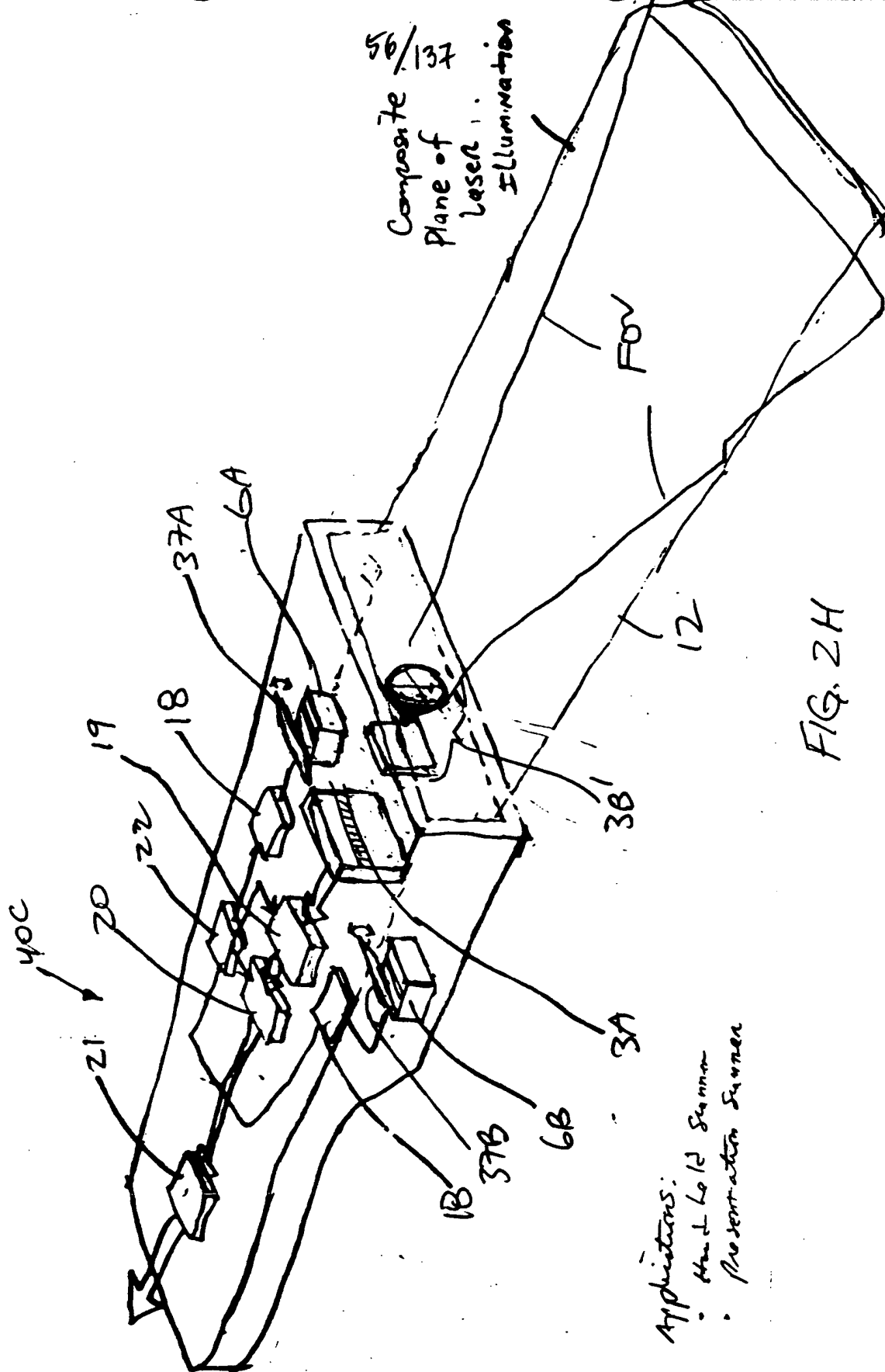


FIG. 2G



208270" T506500T

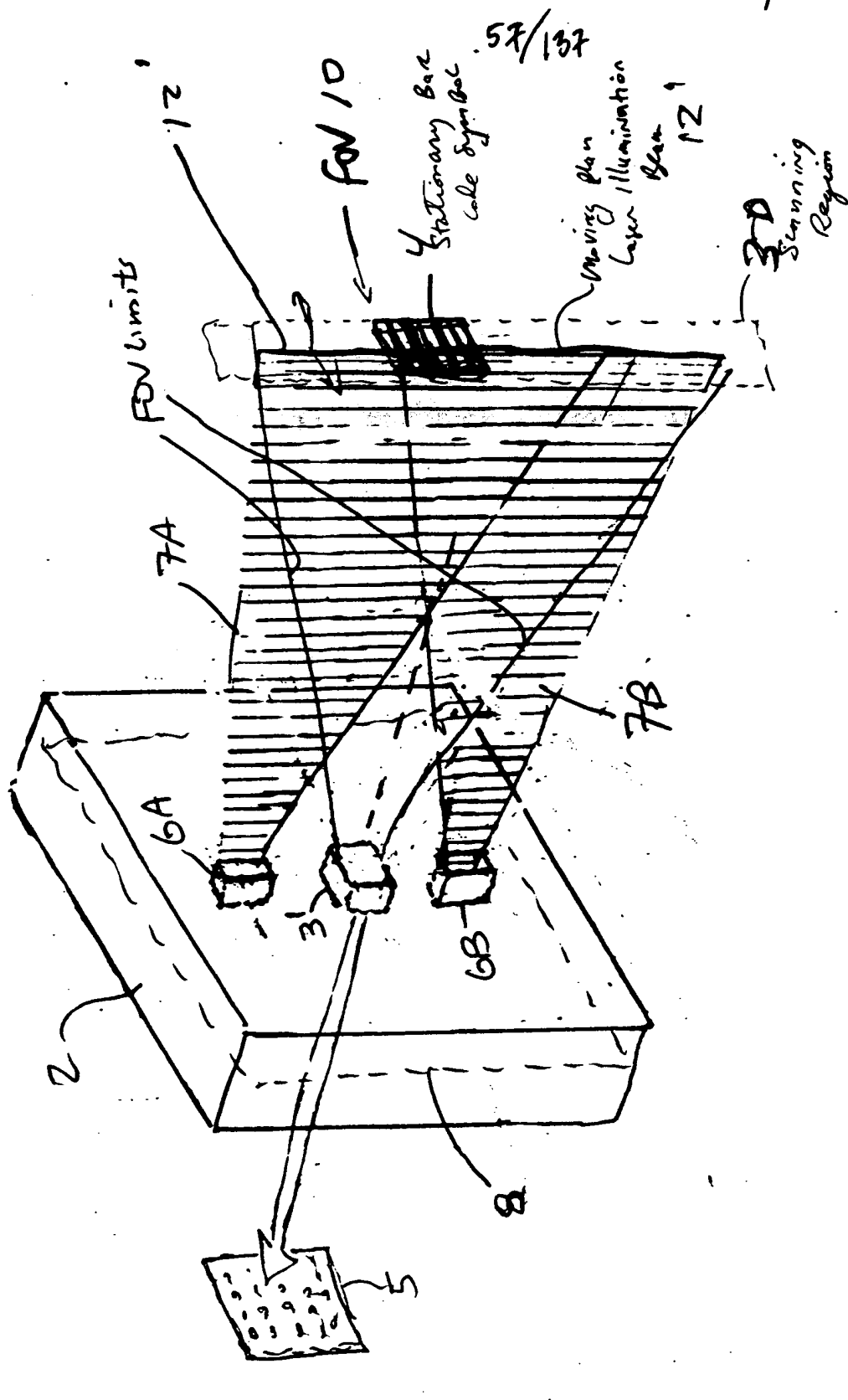
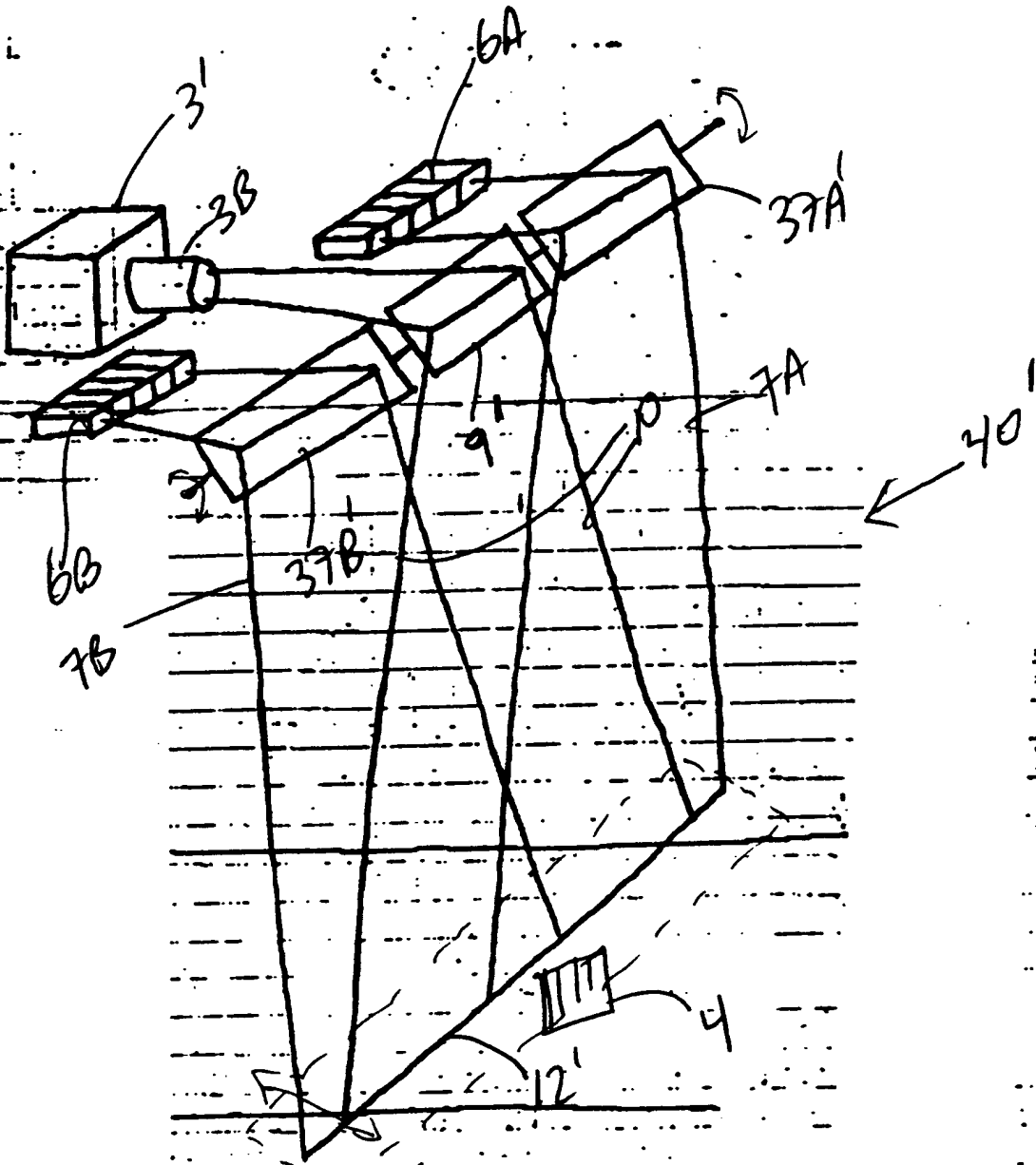


FIG. 2II

58/137



3-D
Scanning
Region

FIG 2I Z

00

203210 T5065007

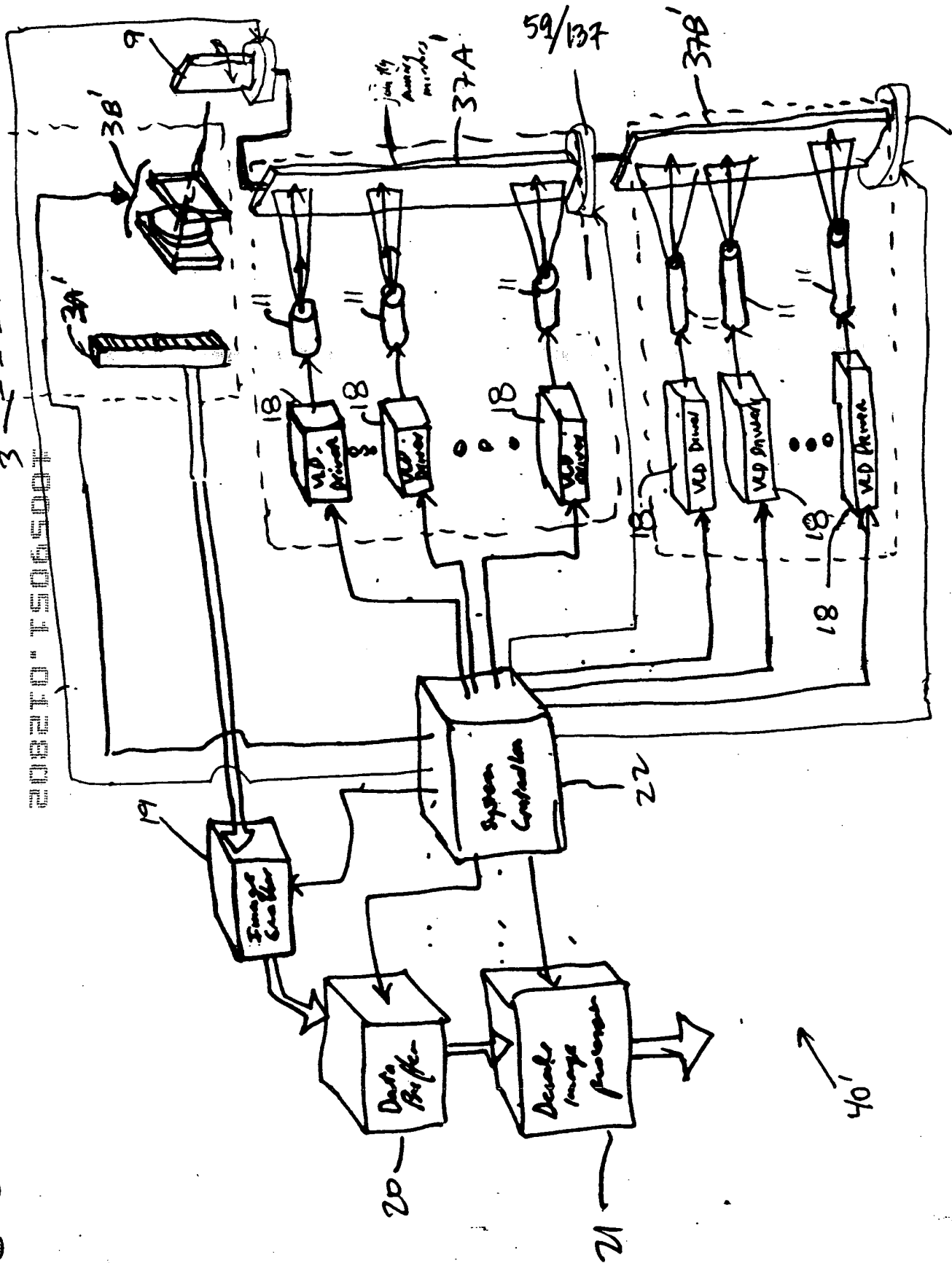


FIG. 2I3



2092FO"TS06S00T

Dr:

60/137

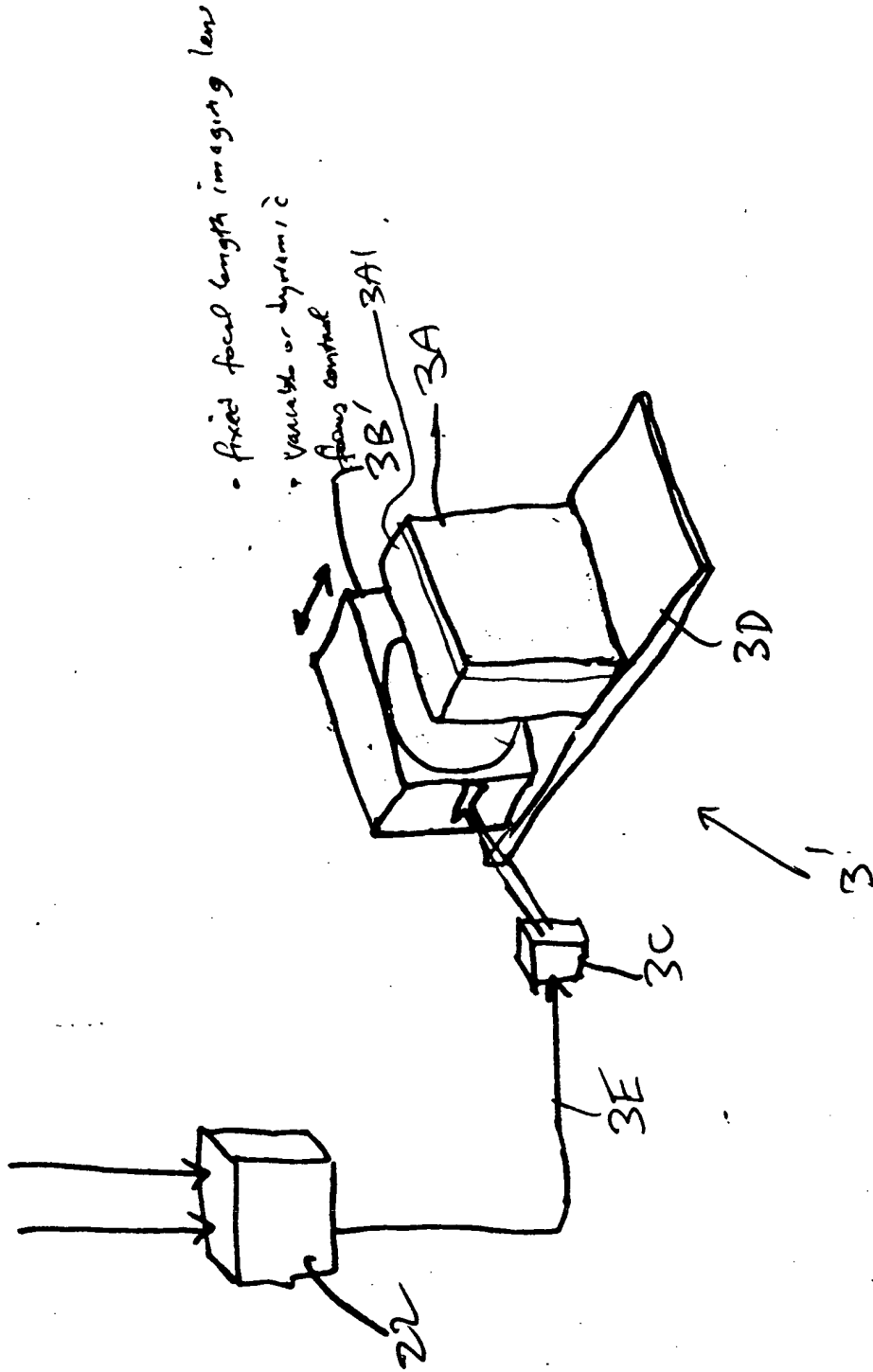


FIG. 2I4

61/137

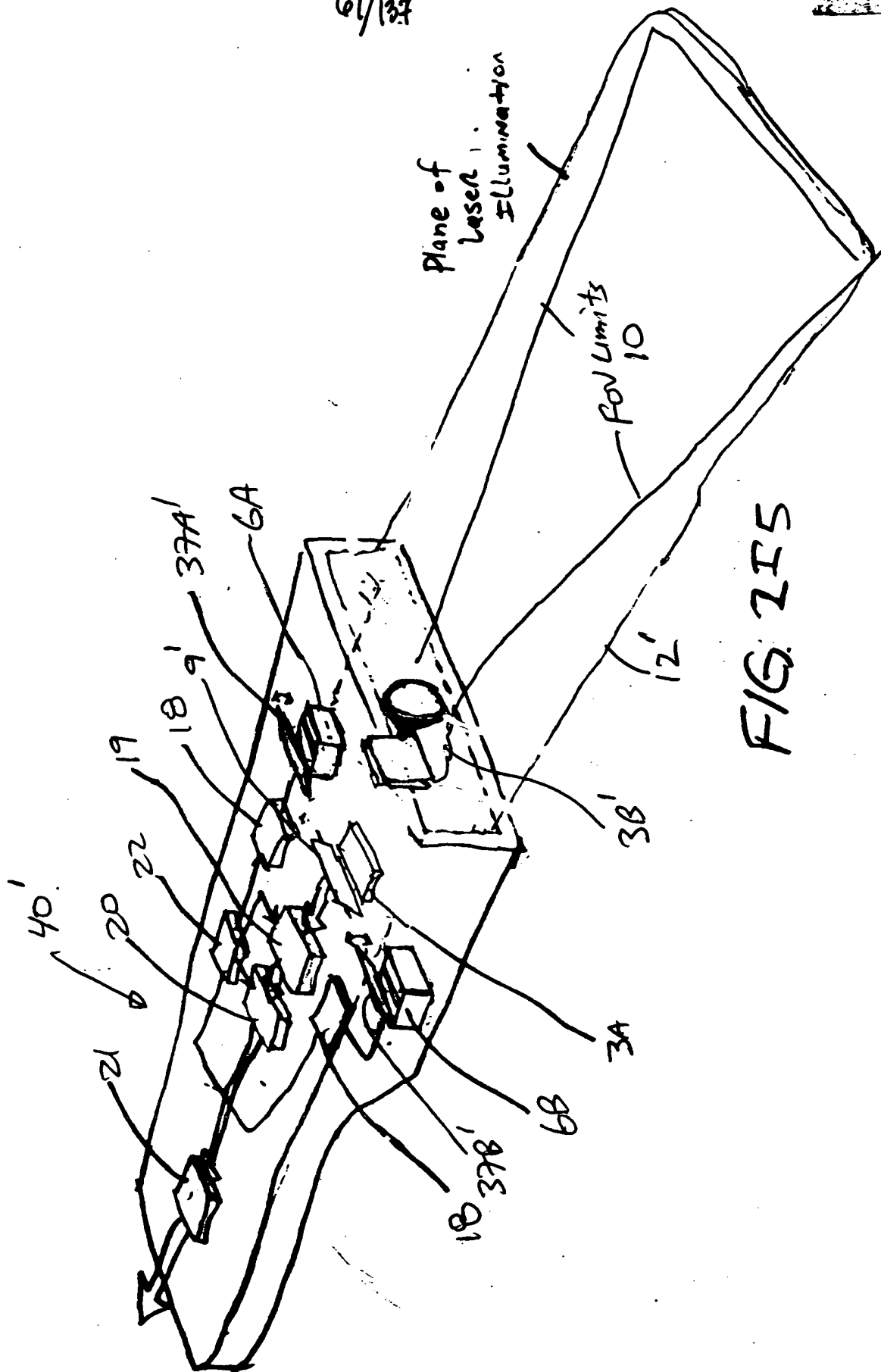


FIG. 215

62/137

208270" T506500T

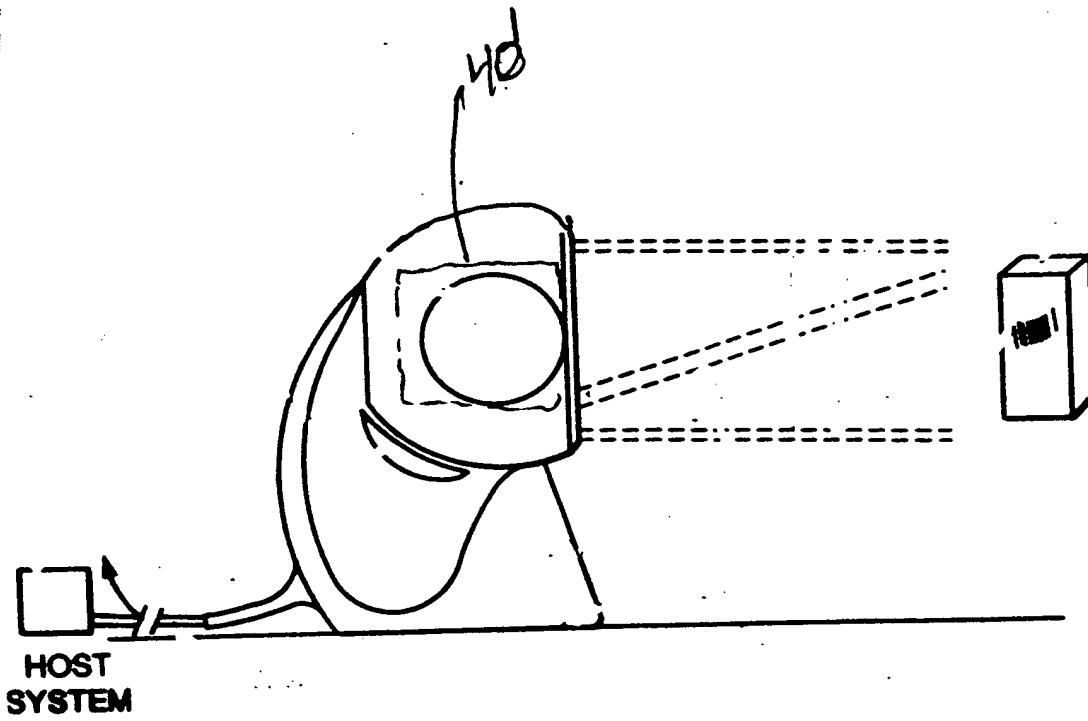


FIG. 2I6

205031 m 016000

63/137

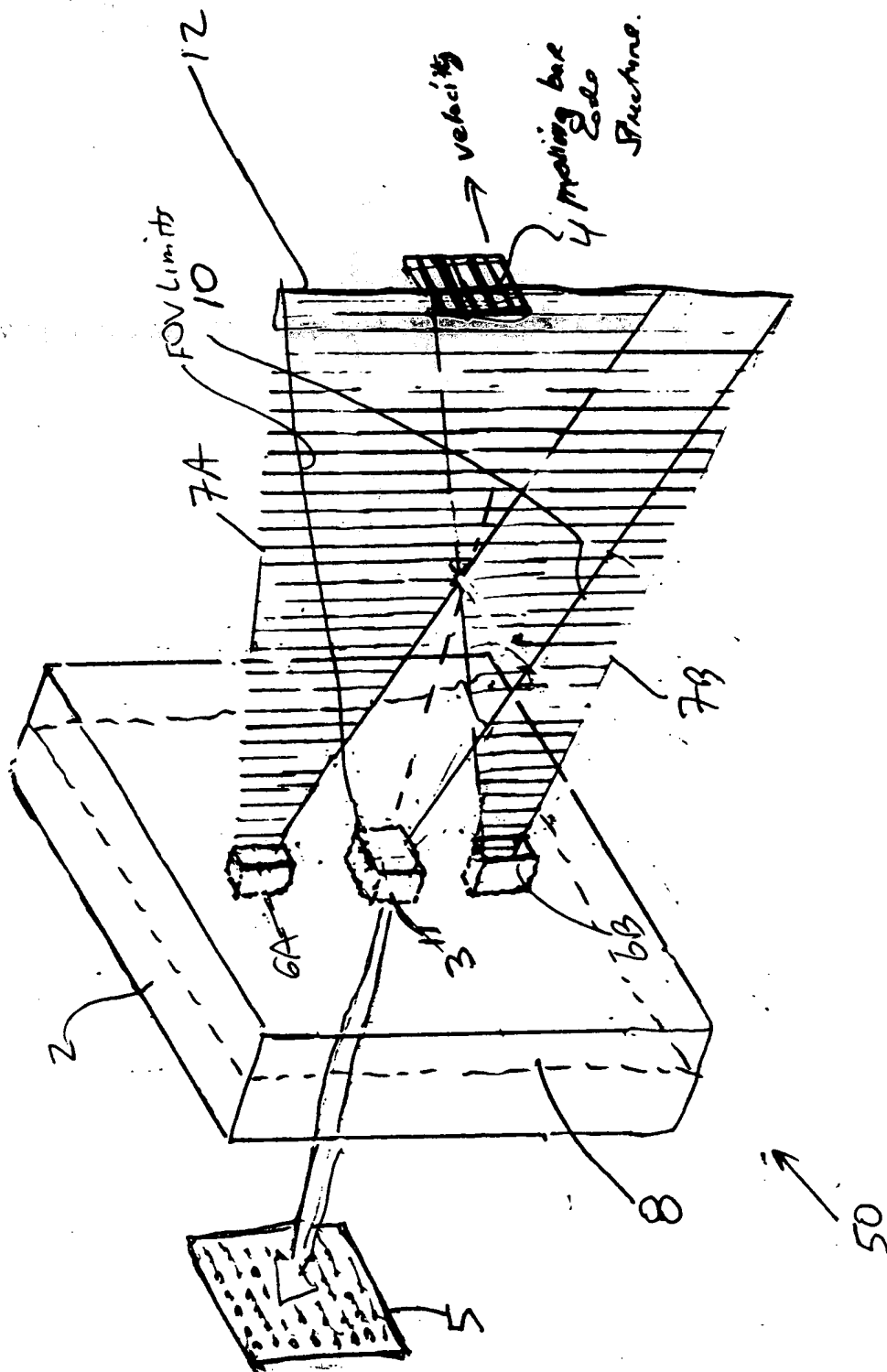


FIG 3A

64/137

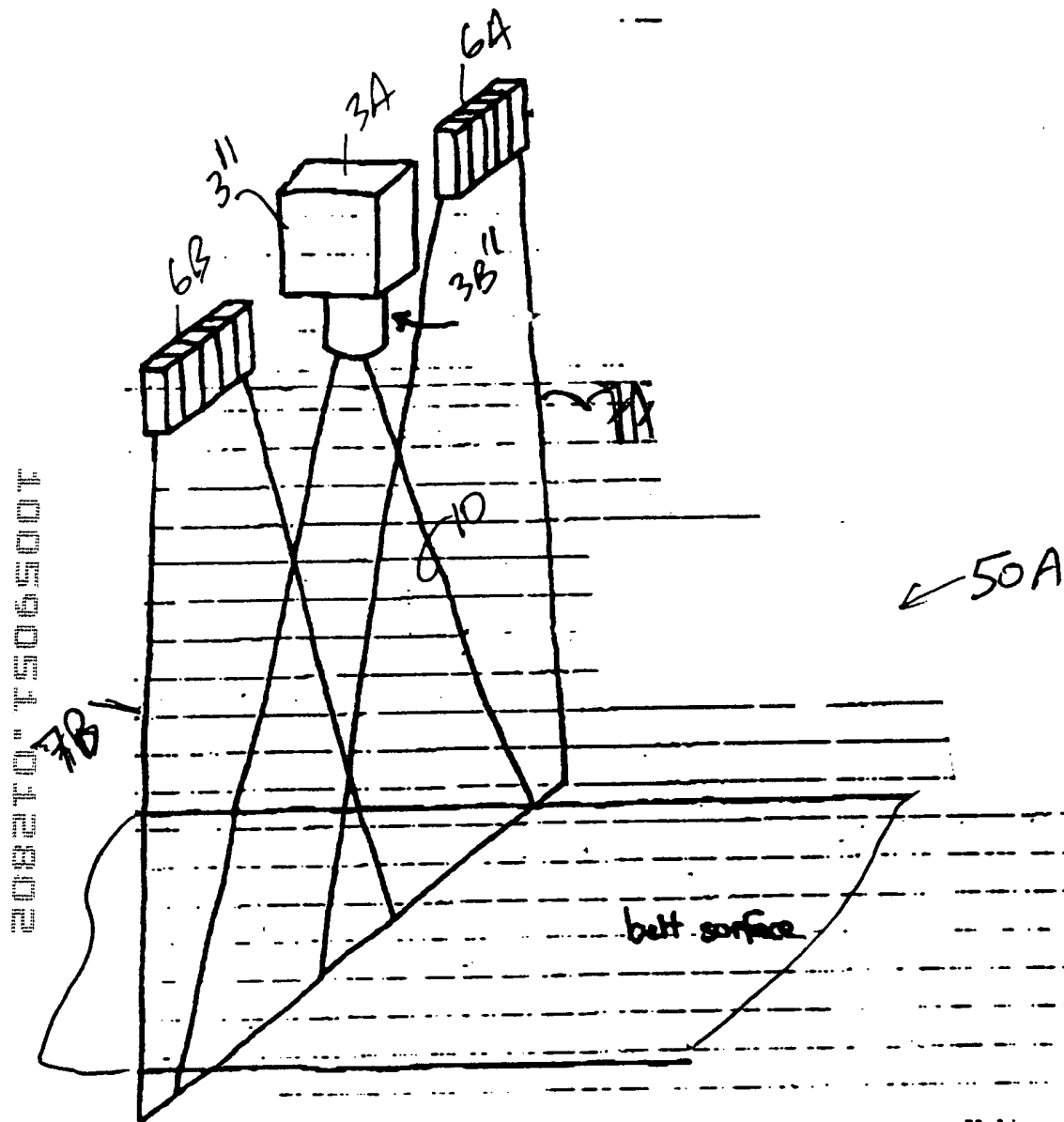


FIG. 3B1

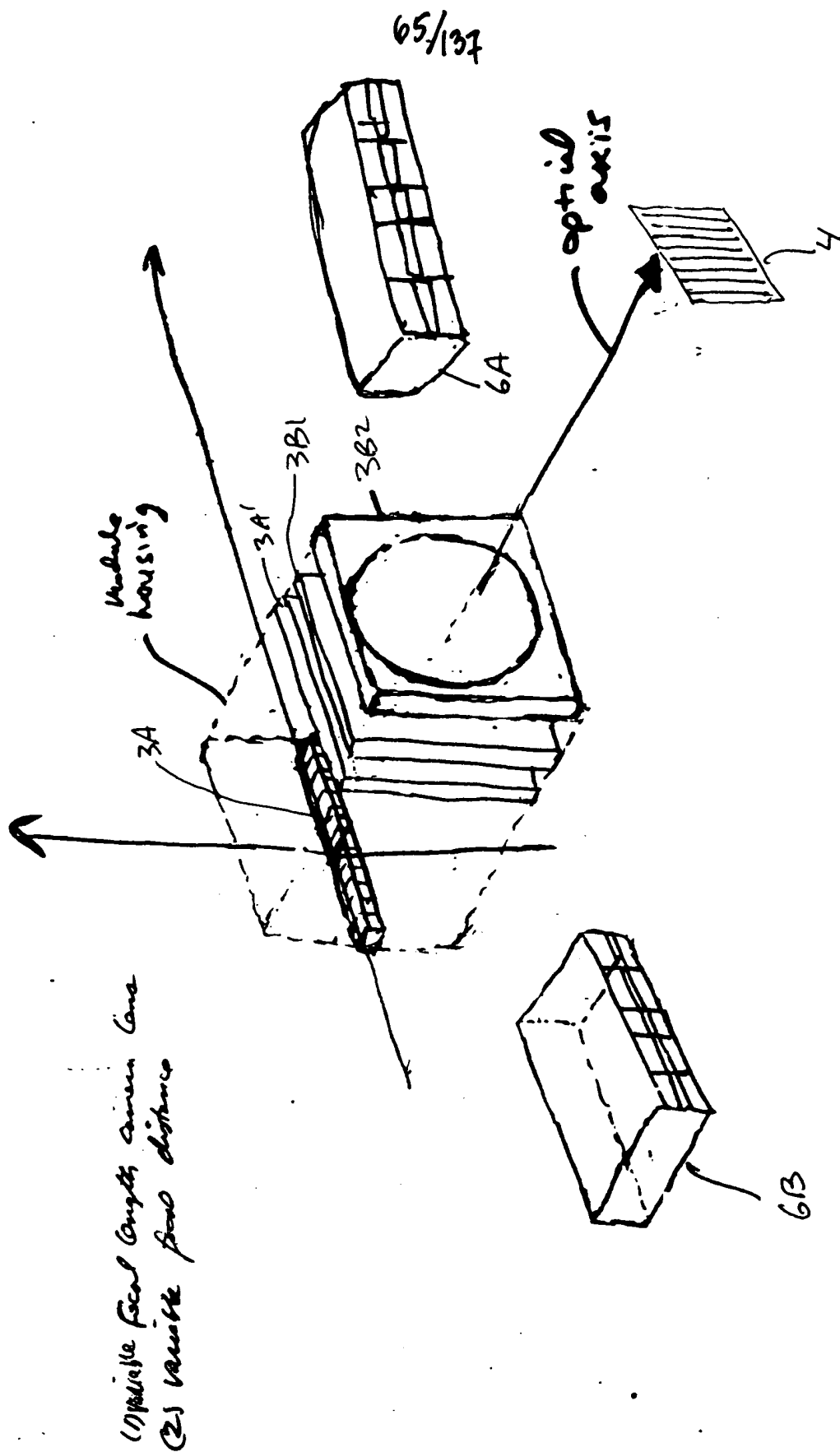


FIG. 3B2

208270" T506SDDT

66/137

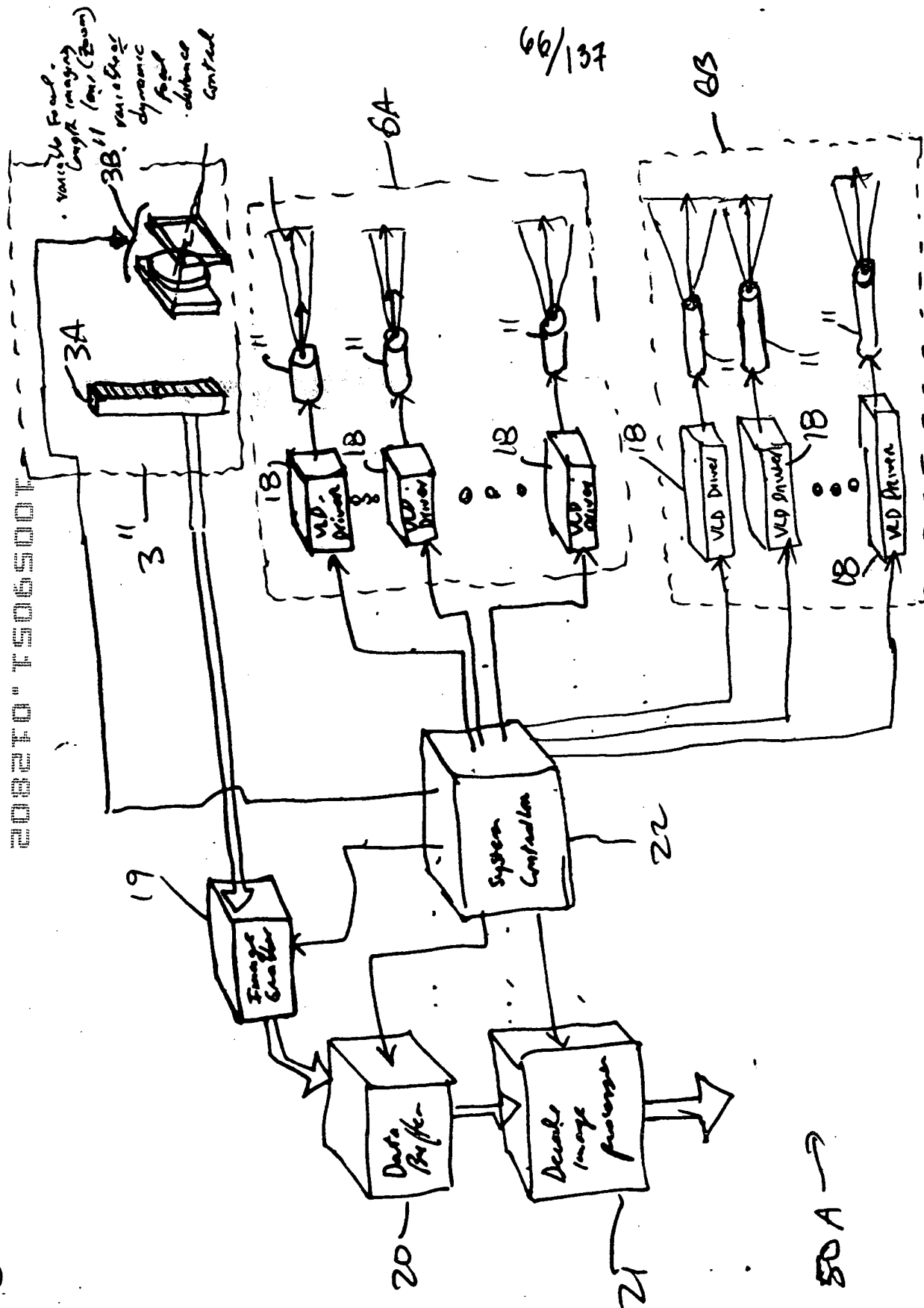
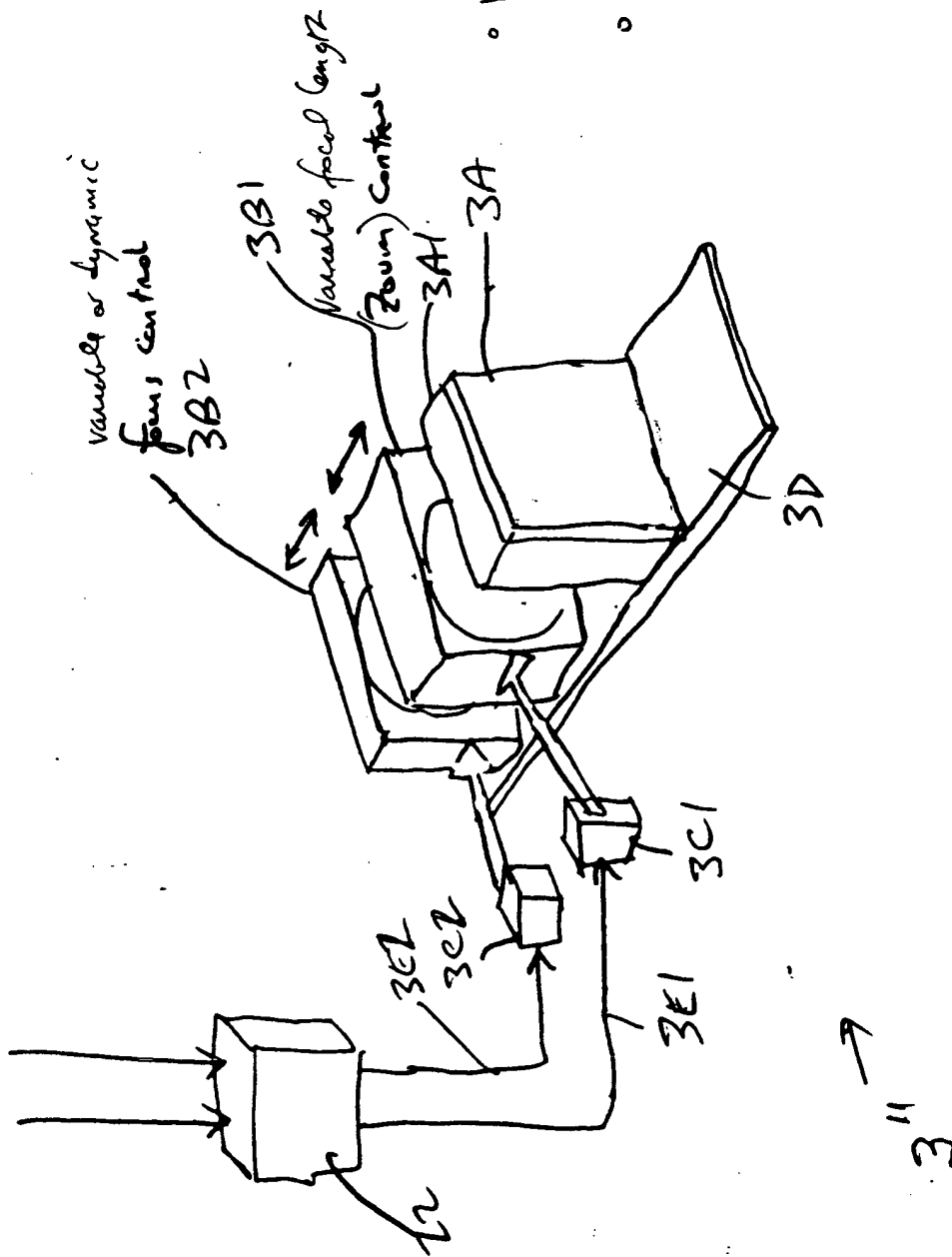


FIG. 3C1

208210" T506500T



67/187

- Variable focal length lenses lens
- Variable focal distance

FIG. 3CZ

208210" T506500T

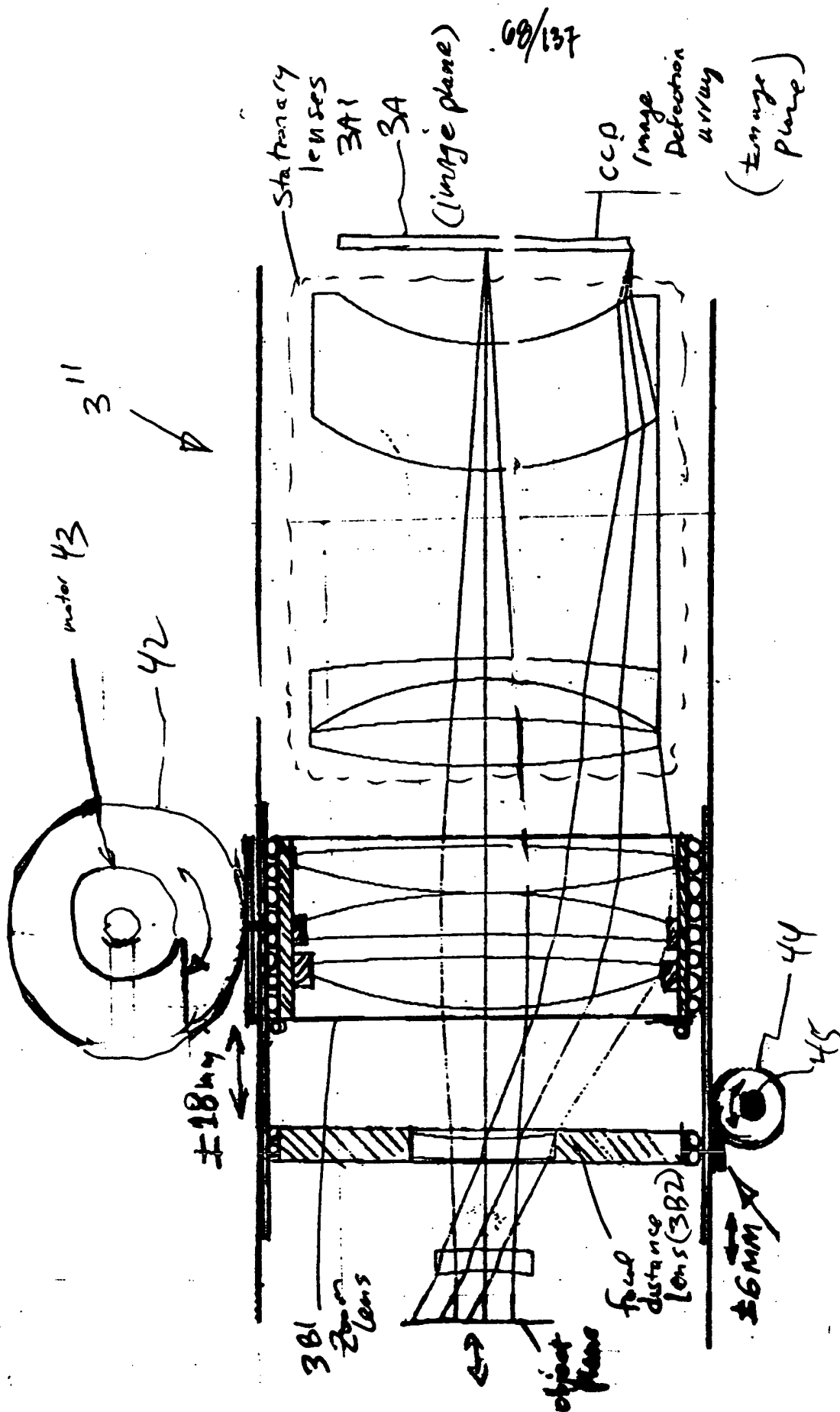


FIG. 3D

69/137

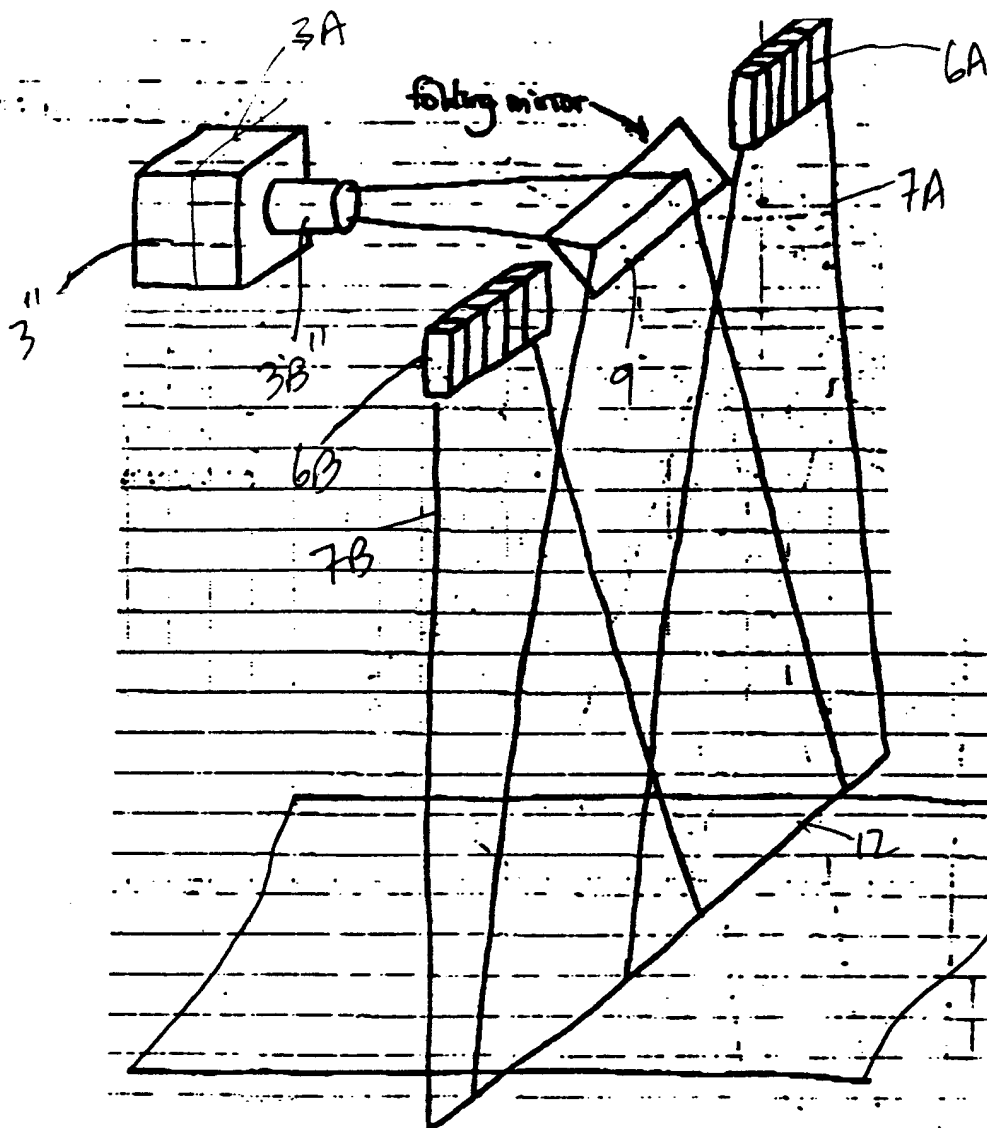


FIG 3E1

203210-T505400T

70/137

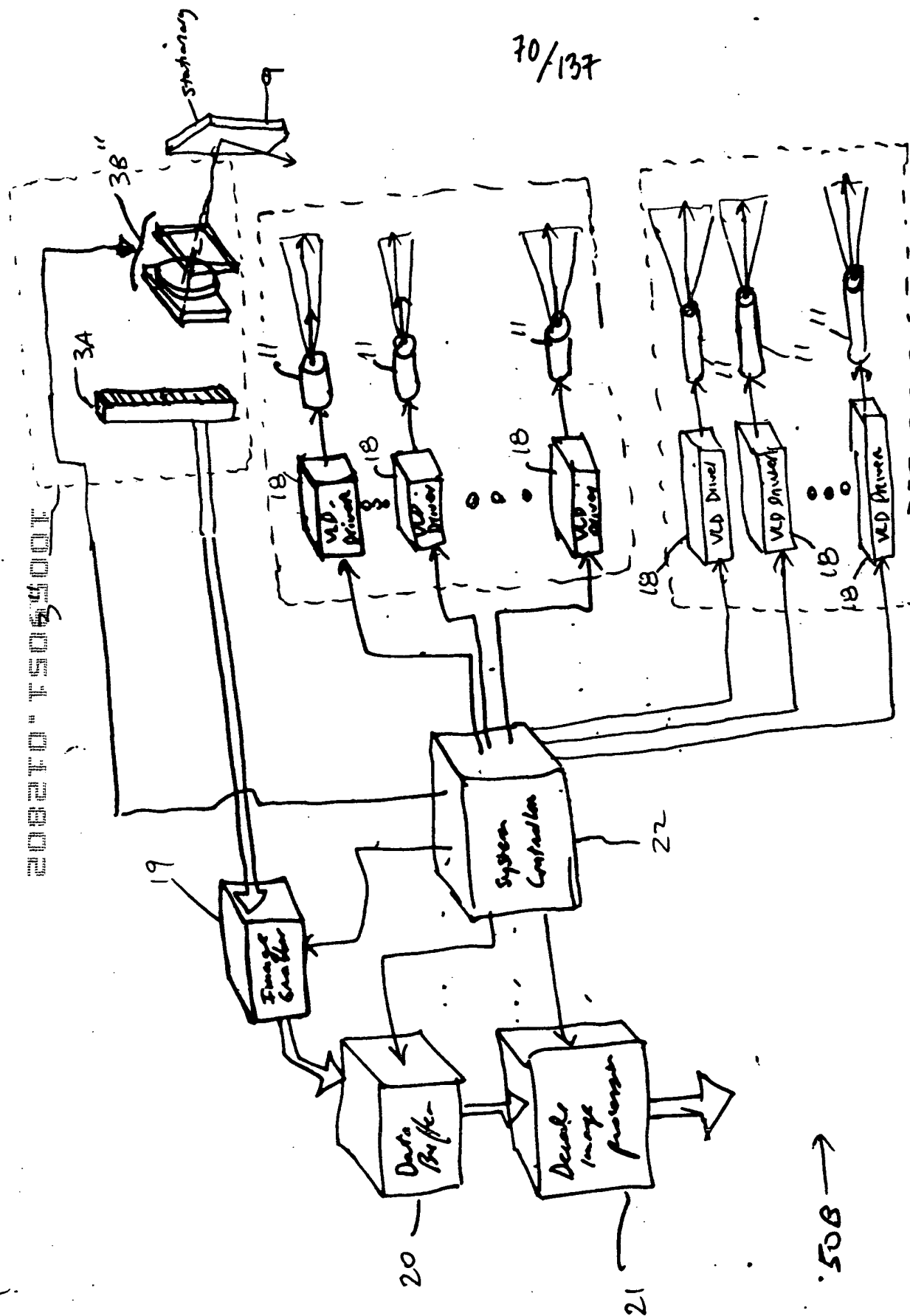


FIG. 3E2

71/137

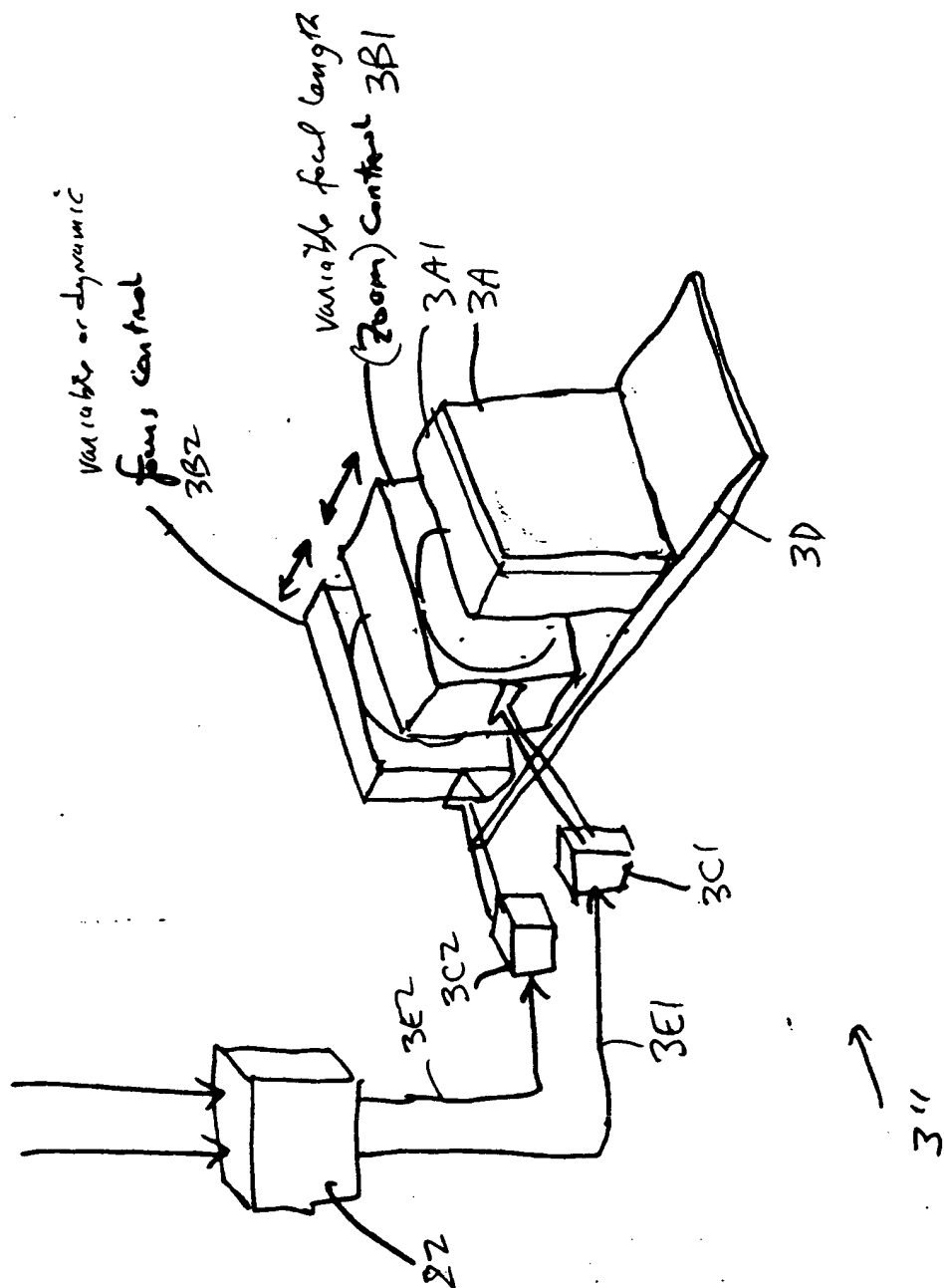
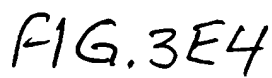
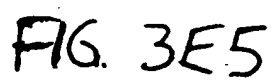


FIG. 3E3

TODD BROWN



3005051 012603



100-69010-2



FIG. 3E6

75/107

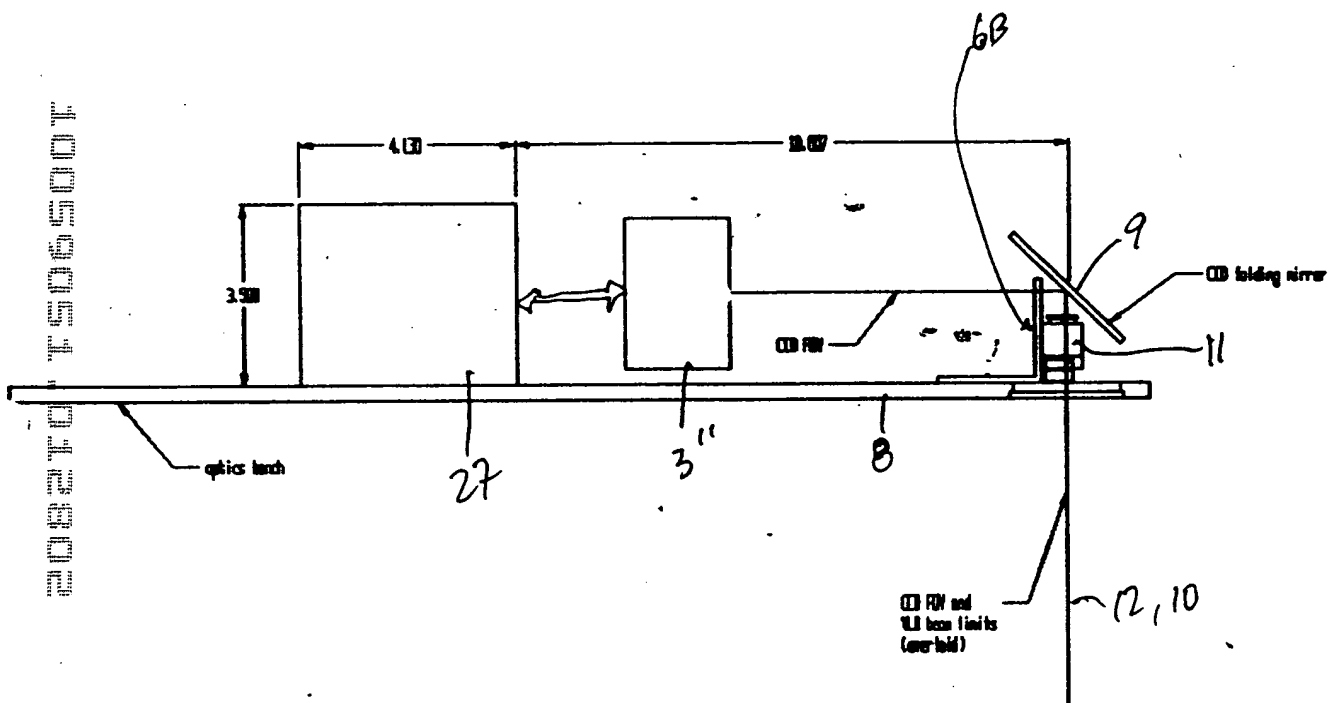


FIG. 3E7

[illegible]

Hand-drawn diagram of a composite figure consisting of a rectangle on top of a trapezoid. The rectangle has a width of 20 inches and a height of 14 inches. The trapezoid has a top width of 20 inches, a bottom width of 36 inches, and a height of 22 inches. The total height of the figure is 36 inches. The diagram is labeled with dimensions and a 25-degree angle.

FIG. 3E8

77/137

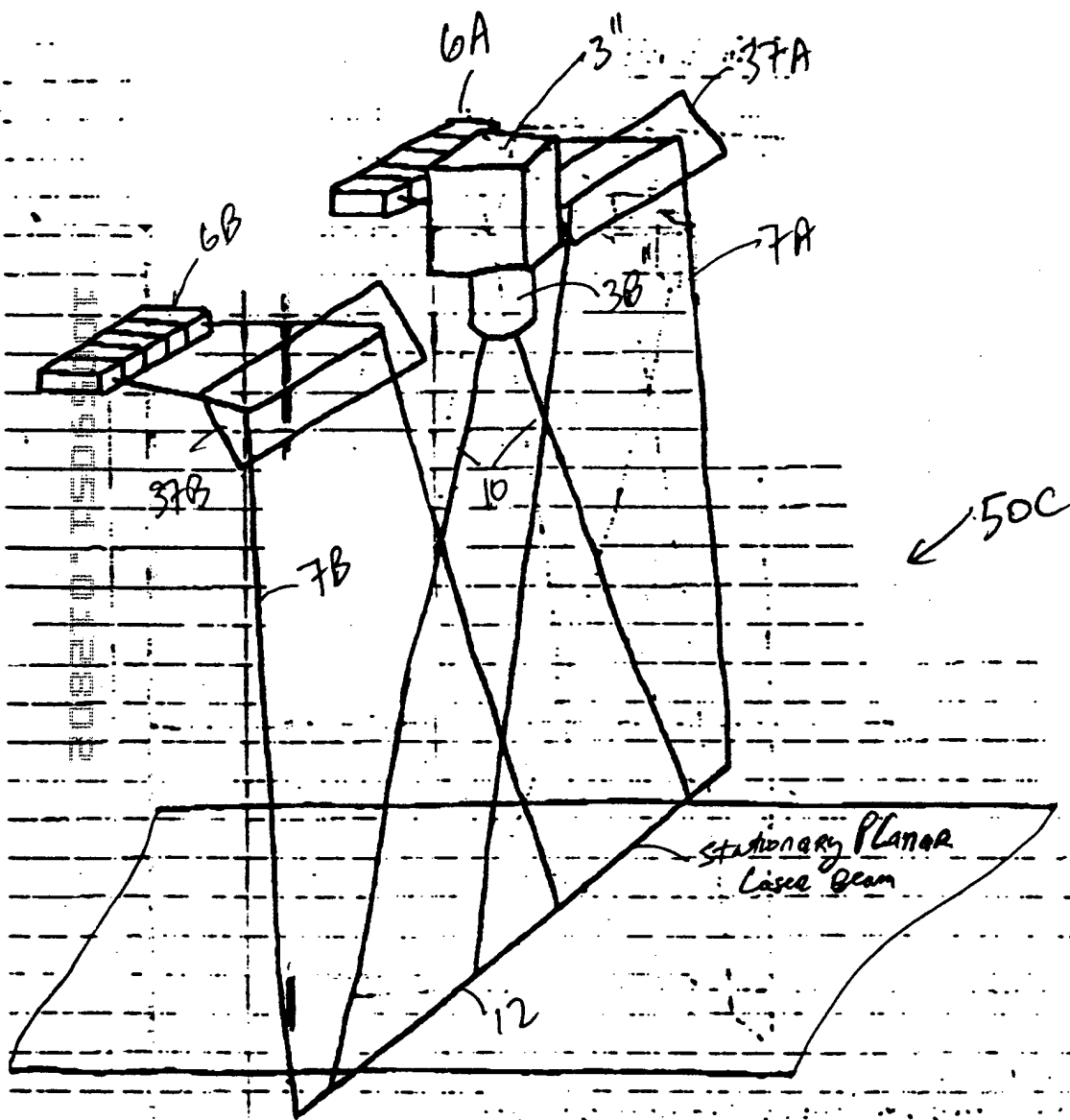


FIG 3F1

203210" F506500T

78/137

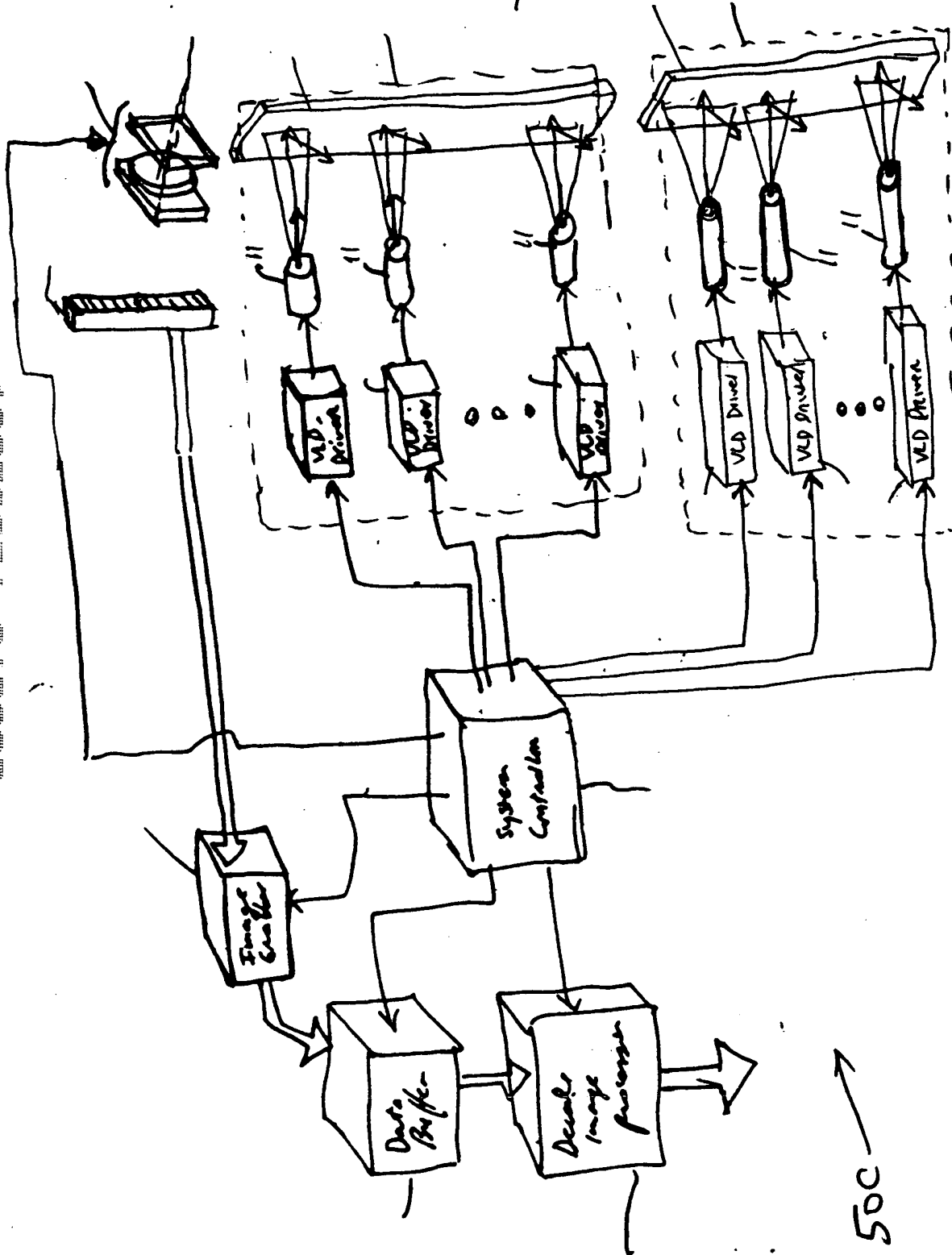


FIG. 3F2

79/137

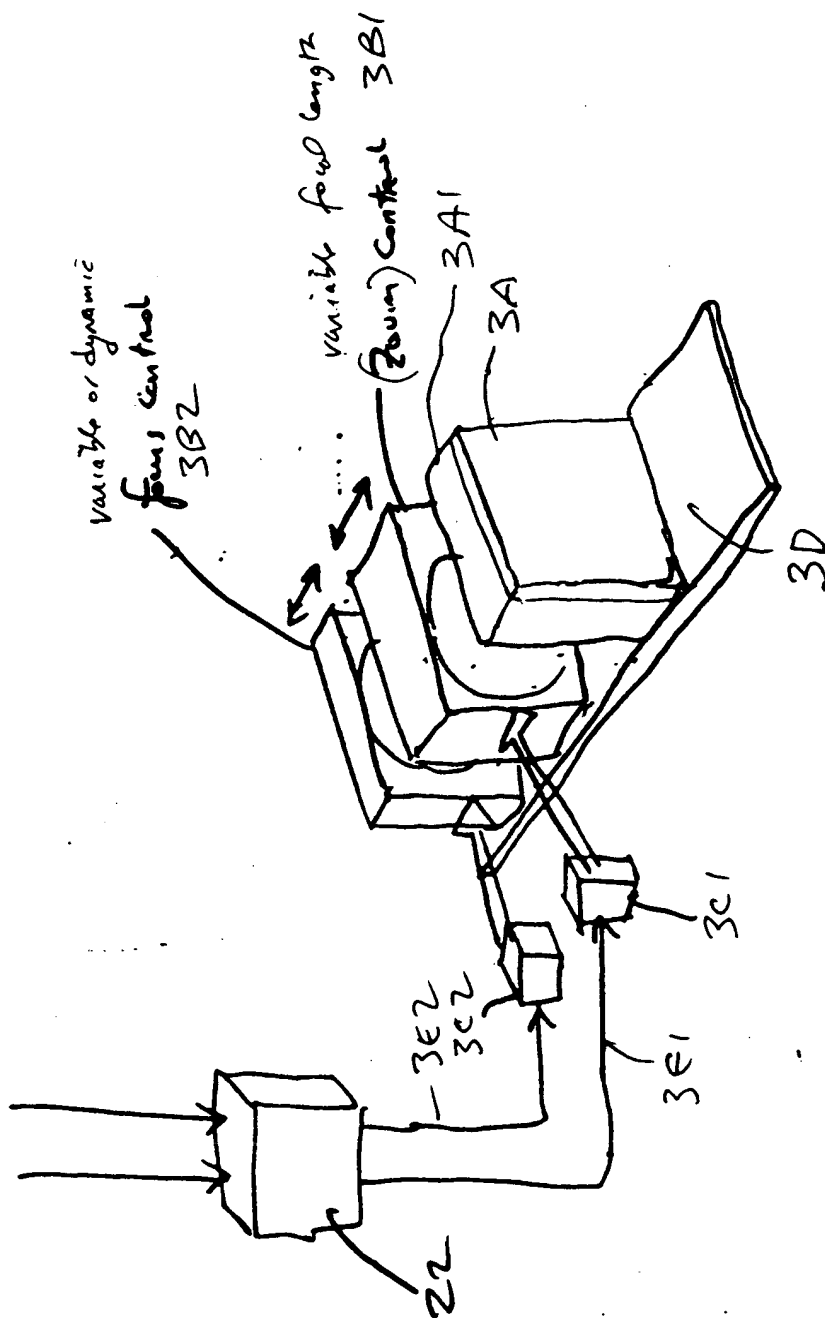


FIG. 3F2

80/137

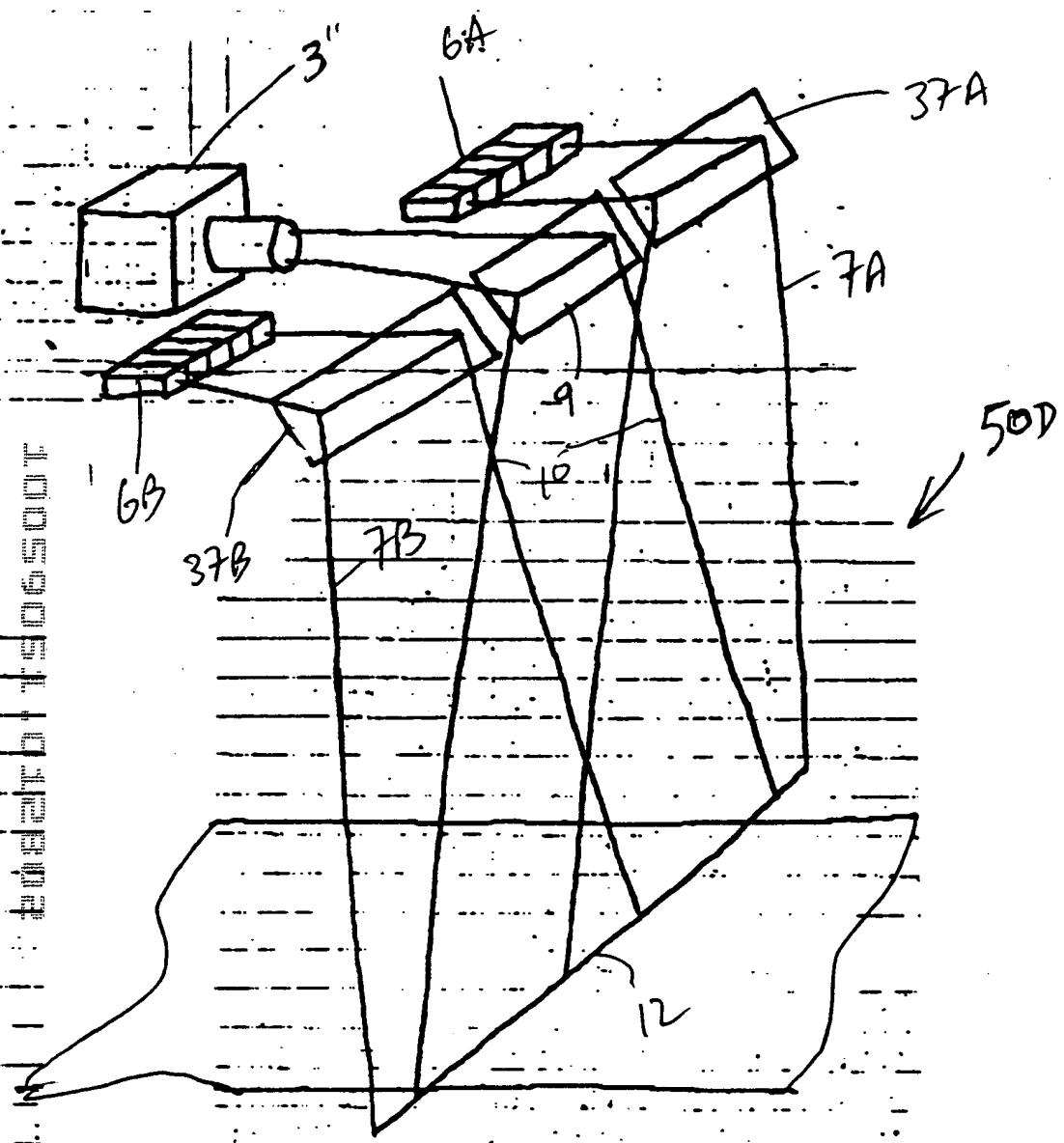


FIG. 3G1

208210" F506500T

81/137

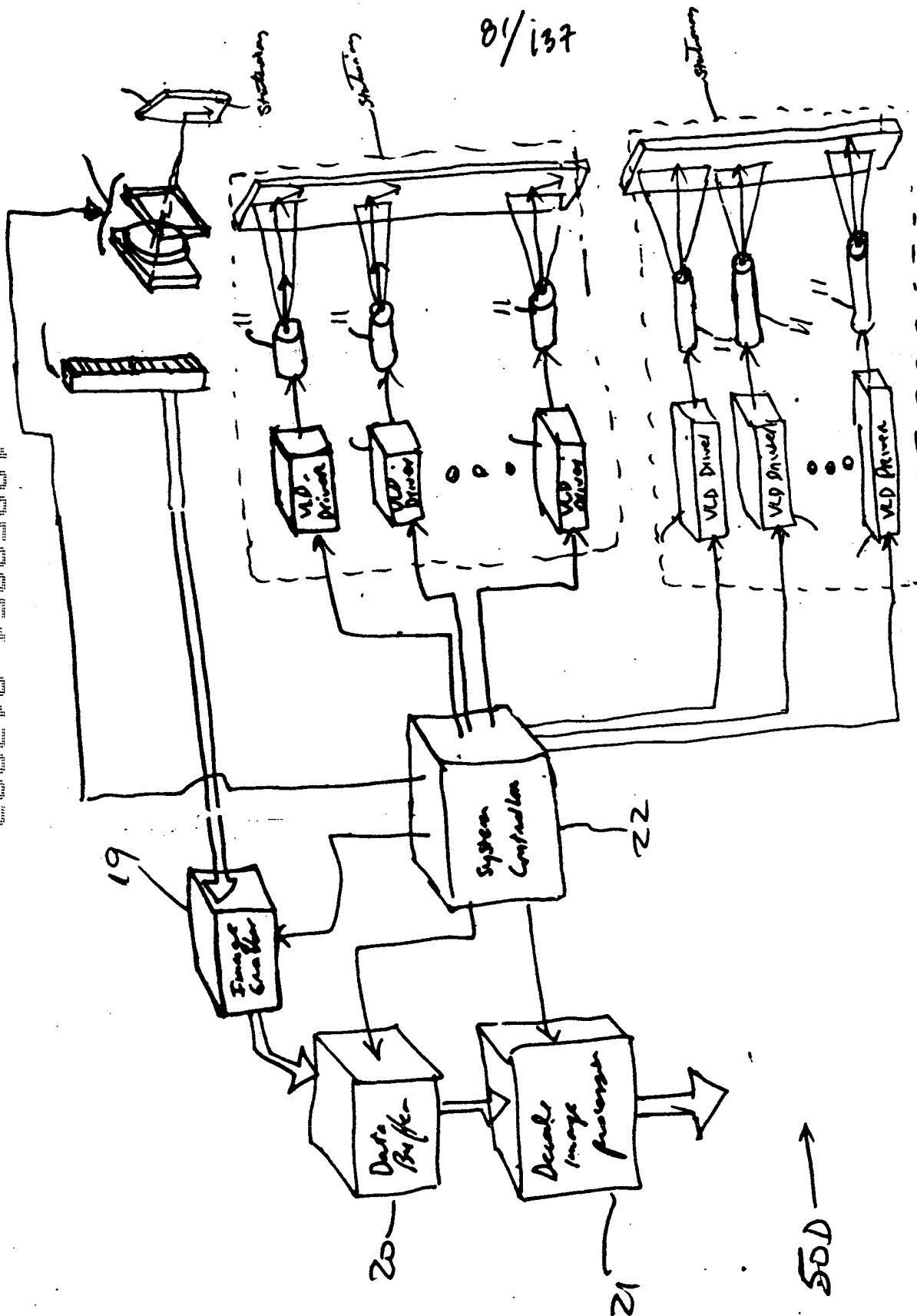


FIG. 392

CO

CO

203210" T506500T

82/137

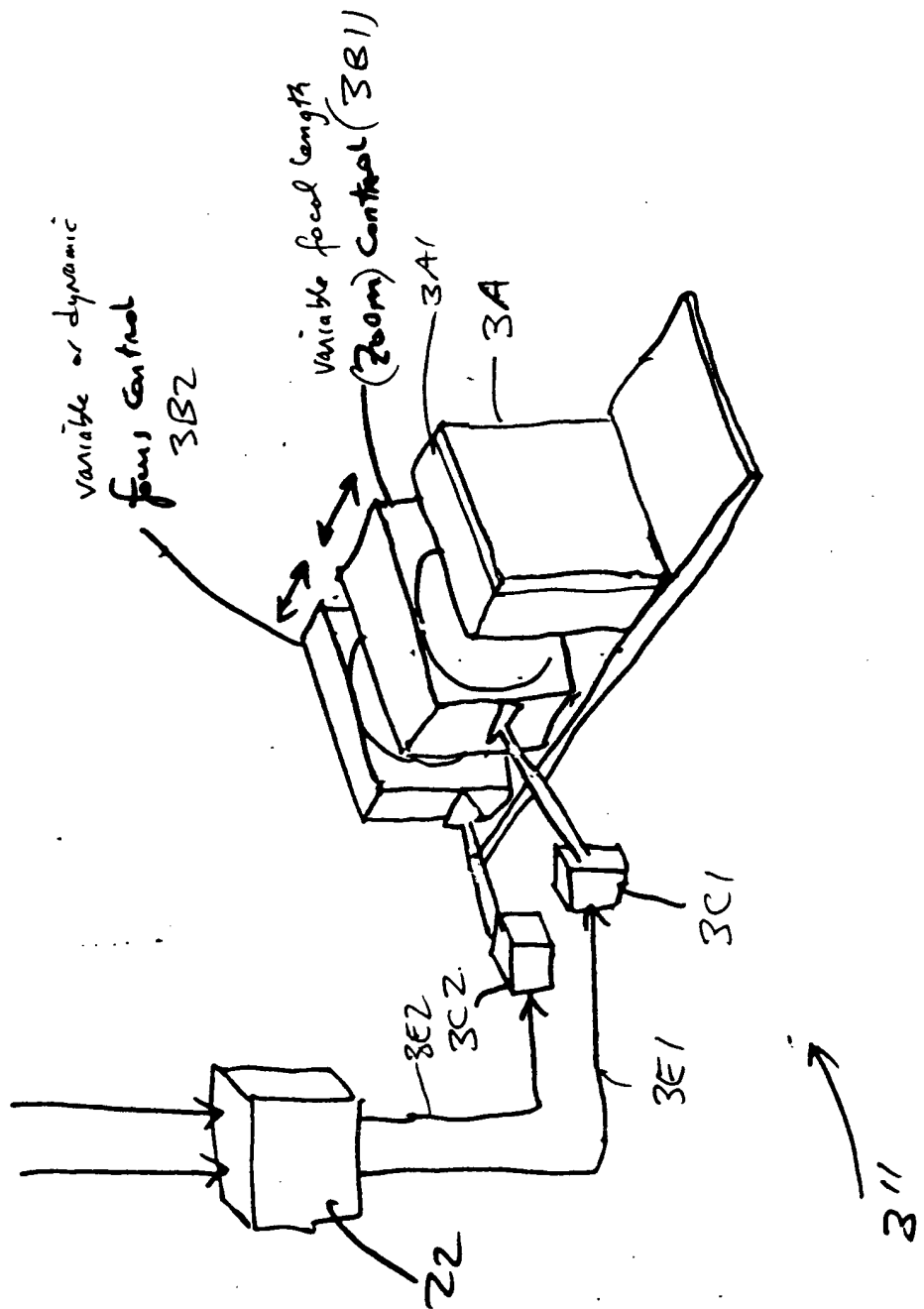


FIG. 3Q3

83/137

200210" T506500T

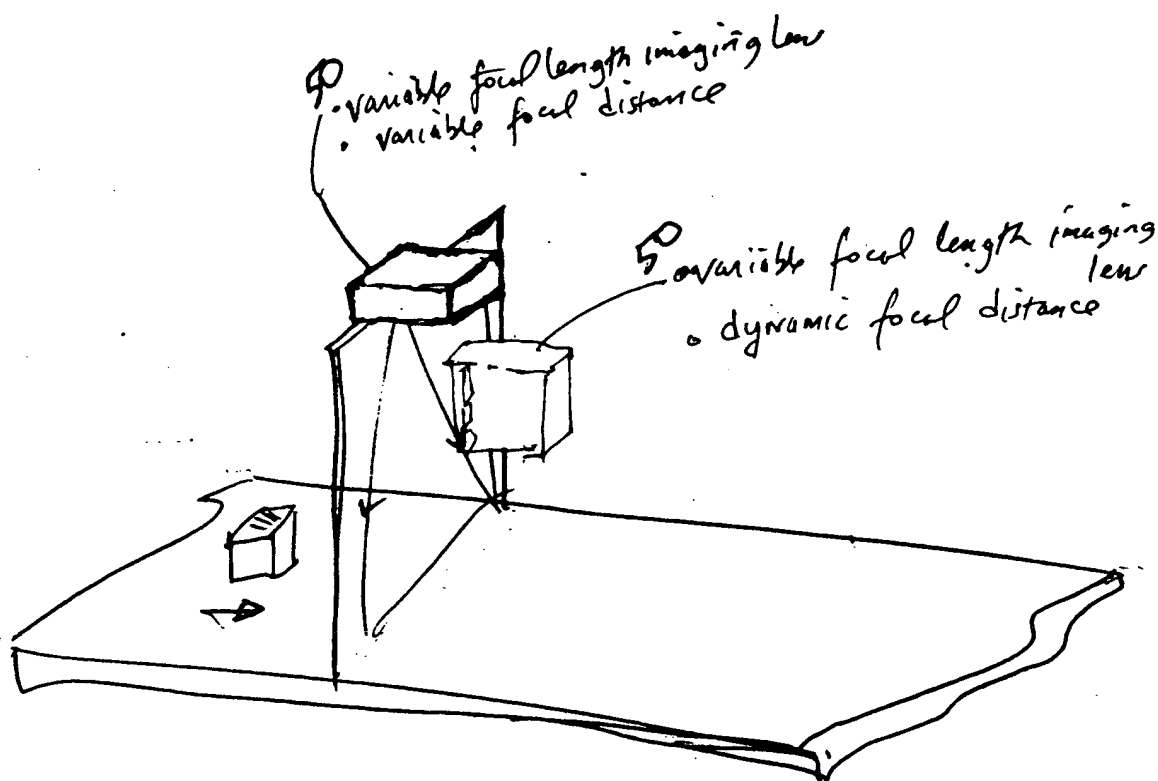


FIG. 3H

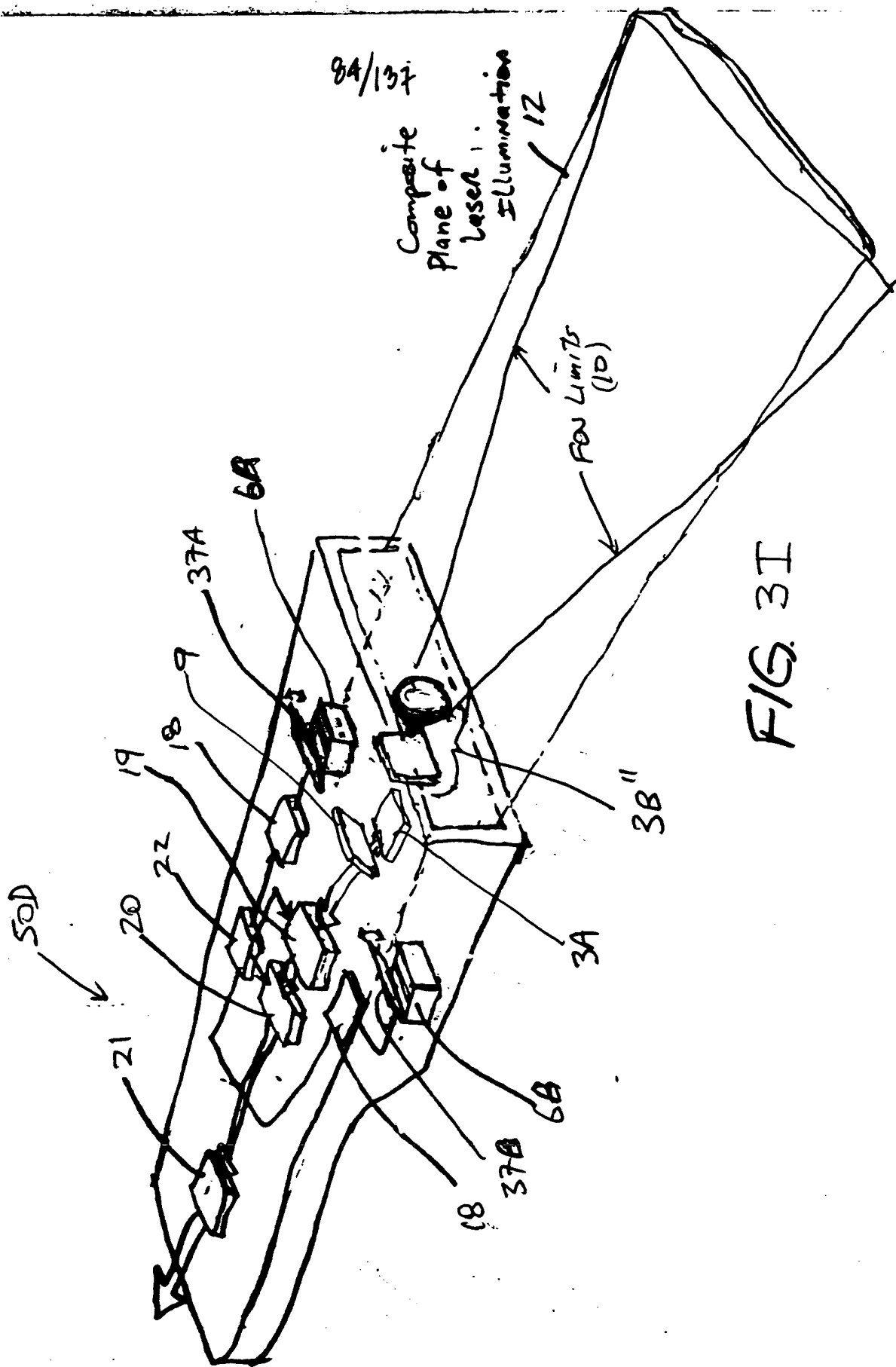


FIG. 3I

2082FD"FS06S00T

85/137

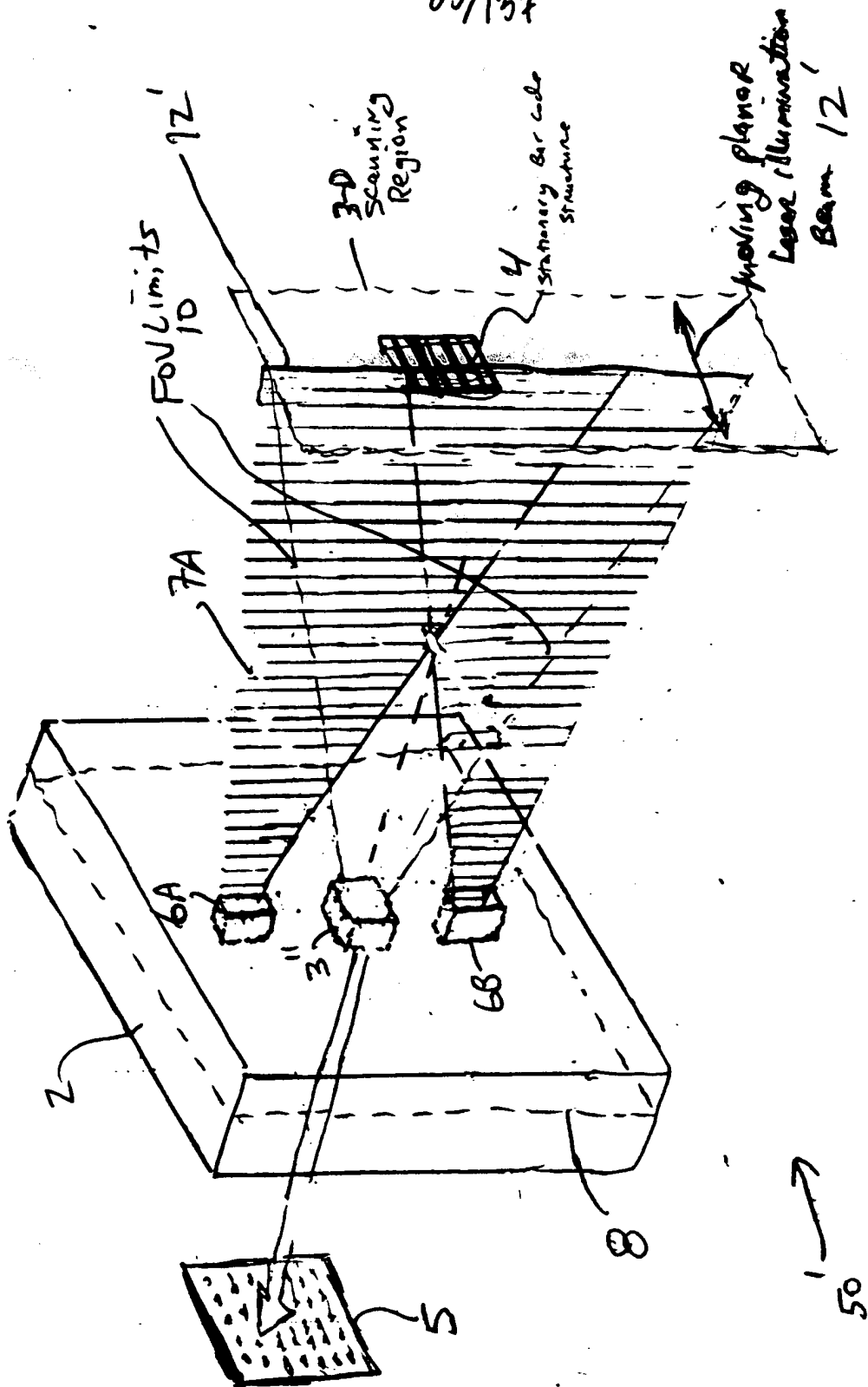


FIG. 3J1

06/137

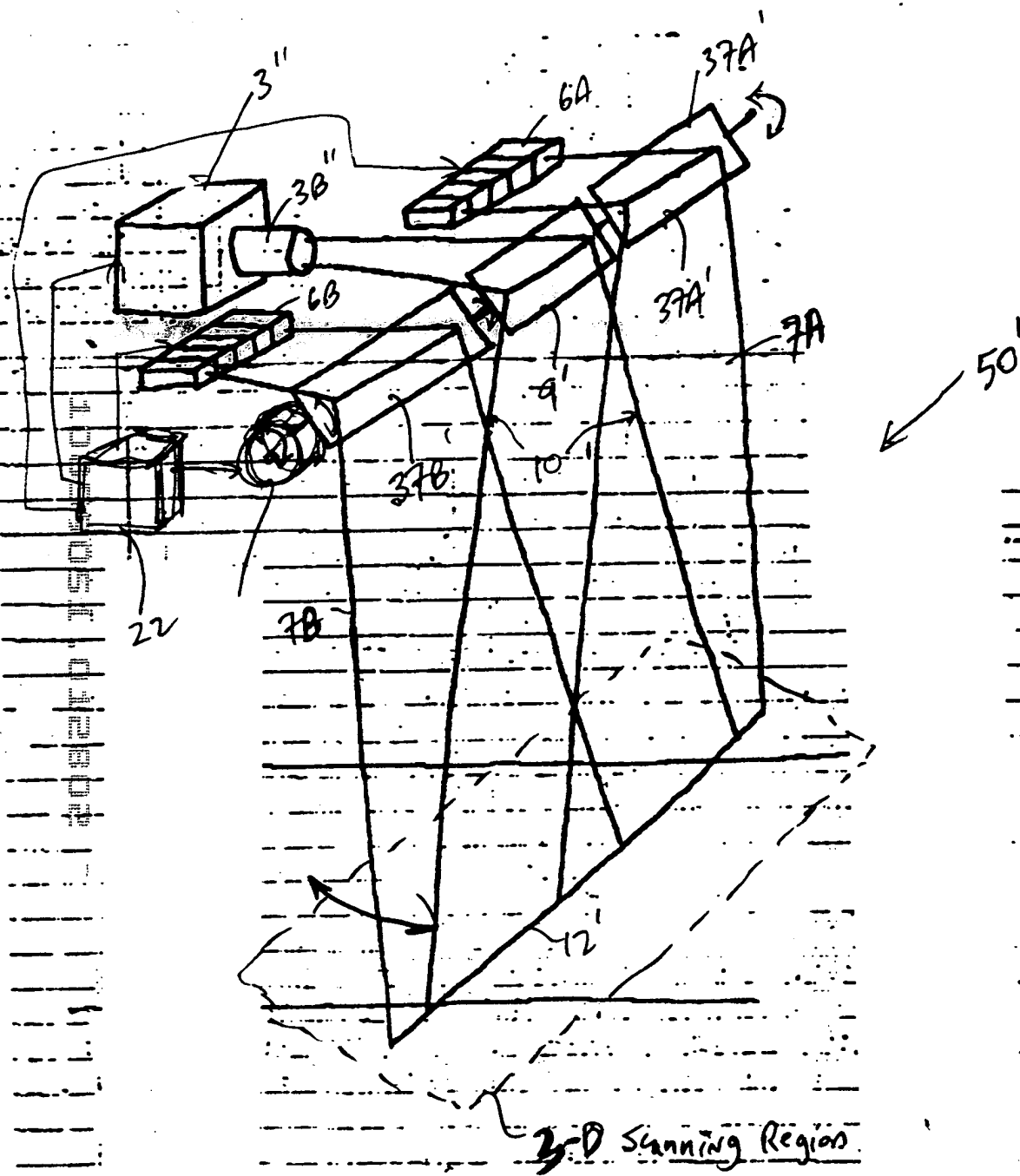


FIG 3J2

8/2/97

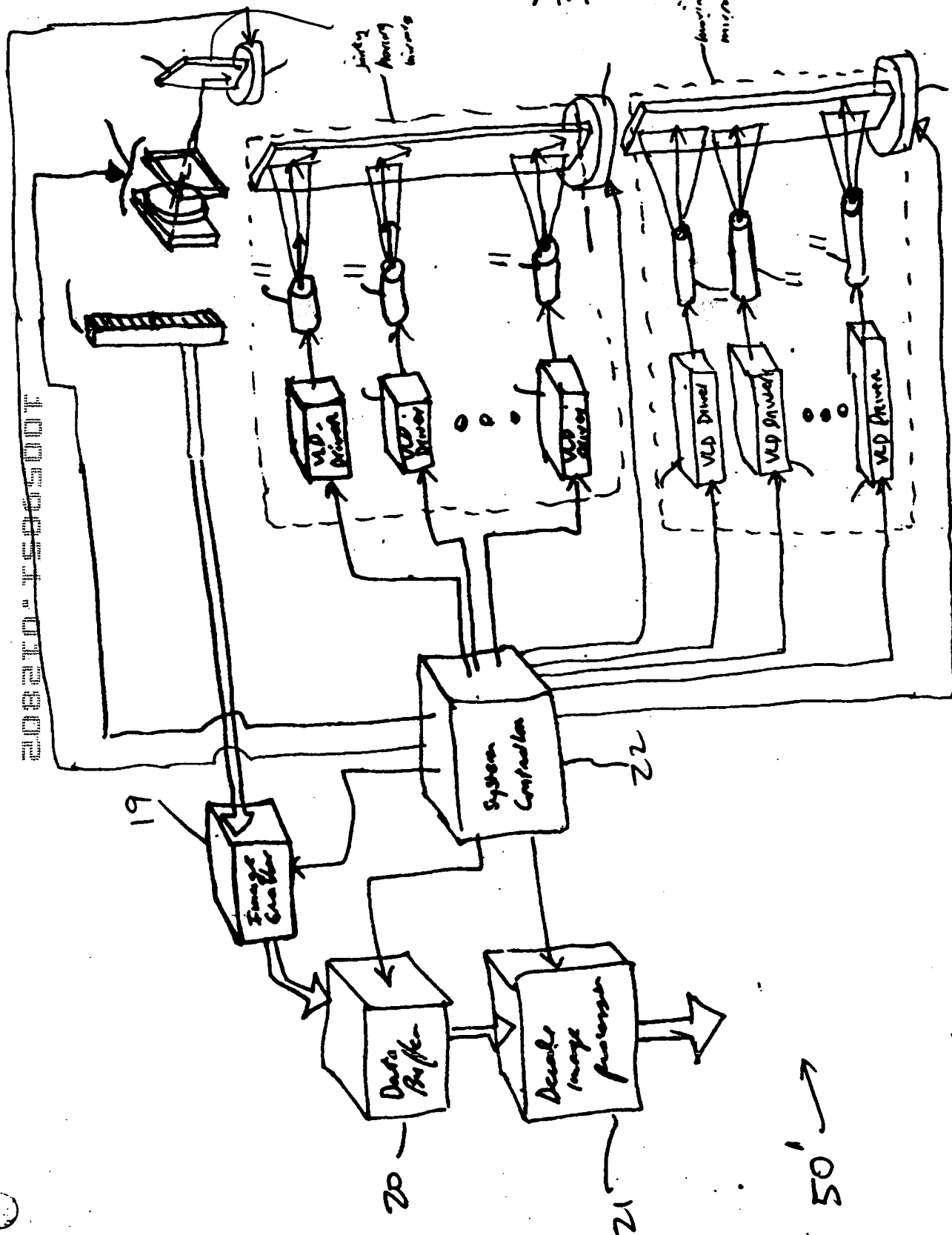


FIG. 3J3

50'

88/137

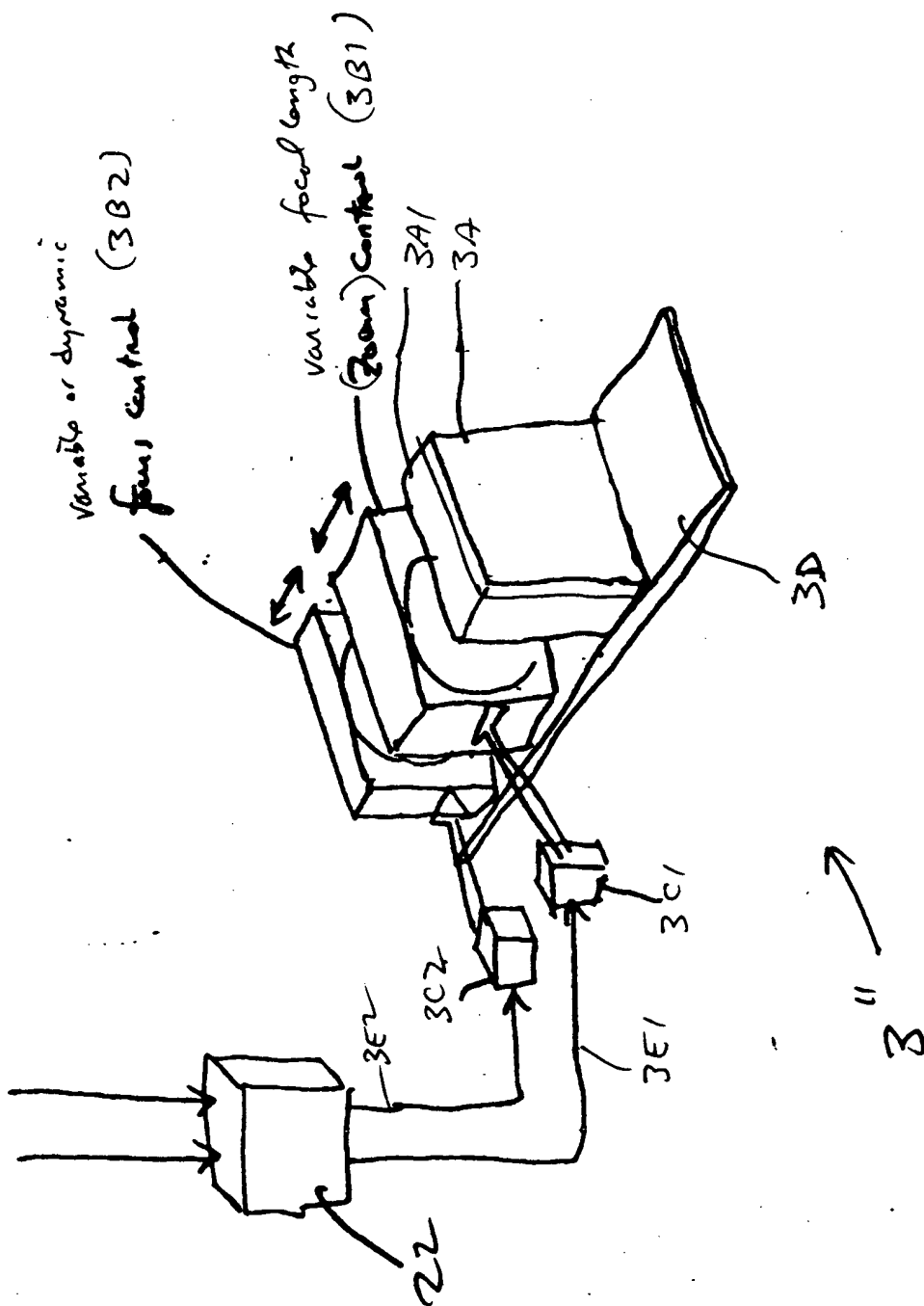


FIG. 354

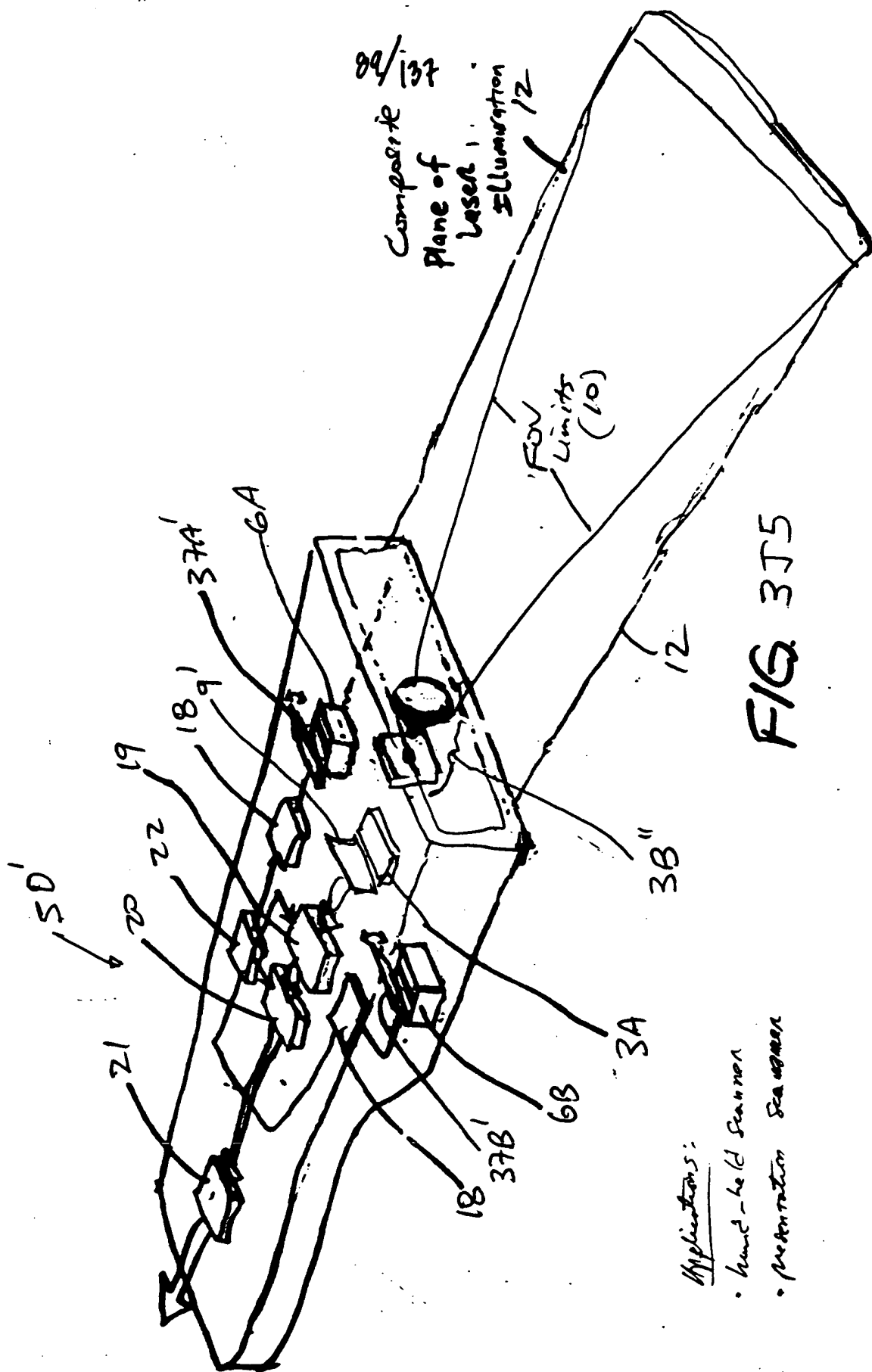
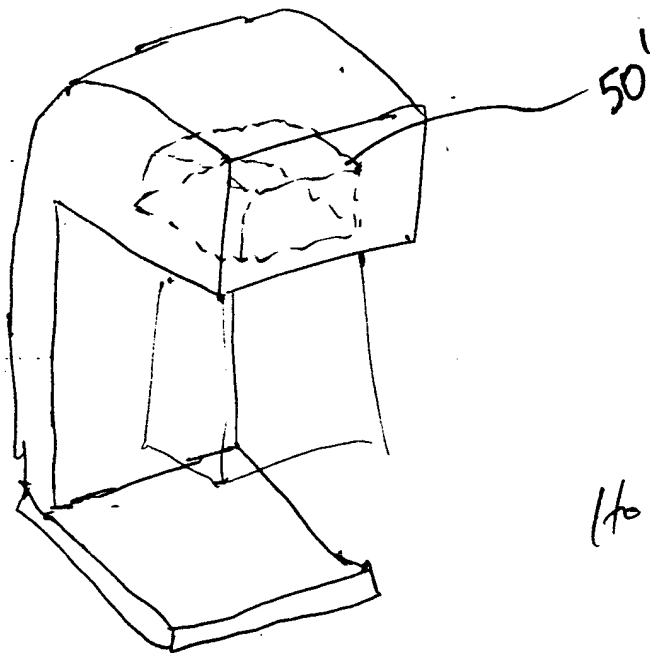


FIG. 3J5

- Applications:
- hand-held scanner
 - perimeter scanner

99/137

202207506500T



2-D
Hold-in der
Scanner

FIG. 315

10059051-012800

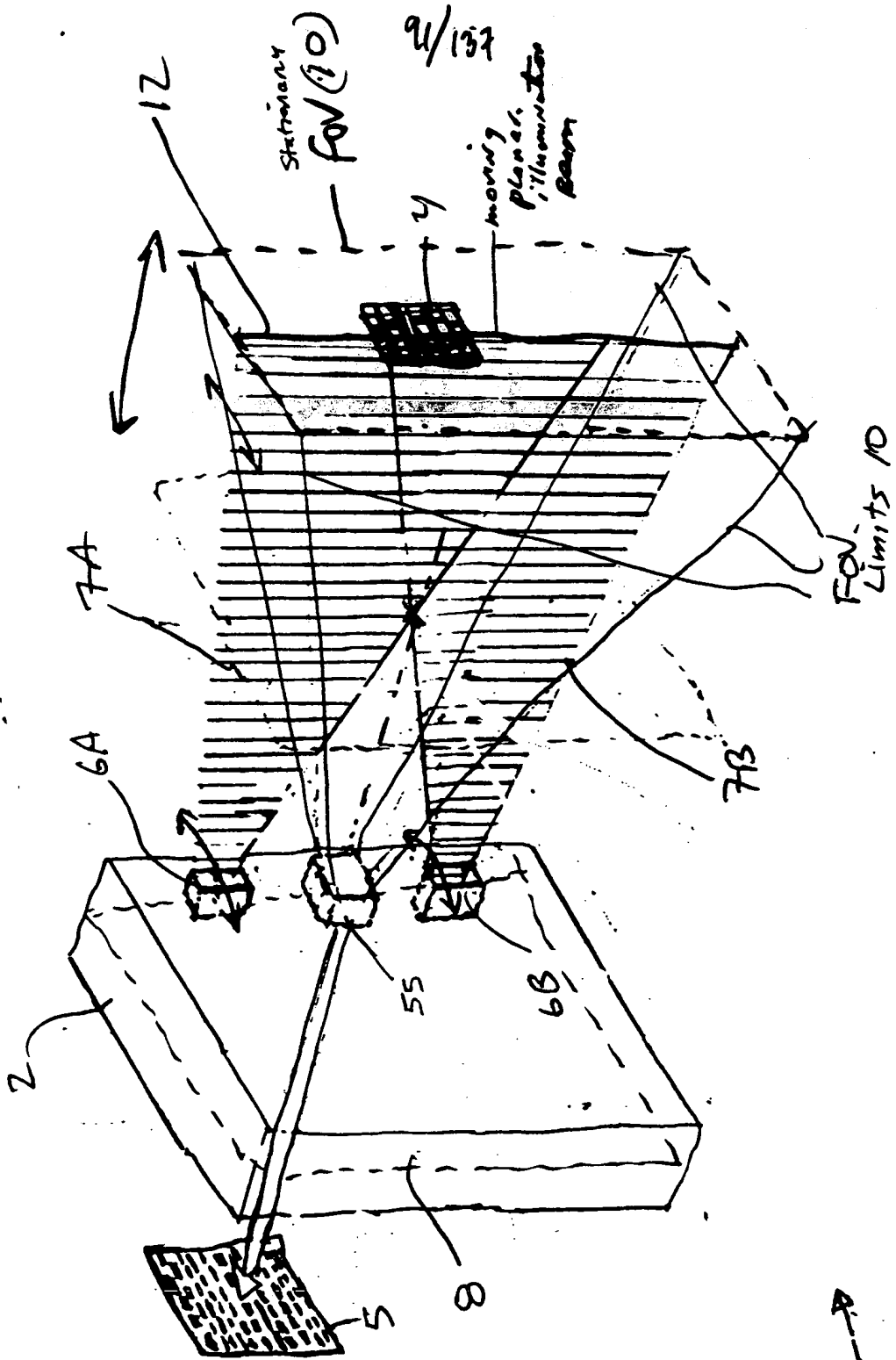
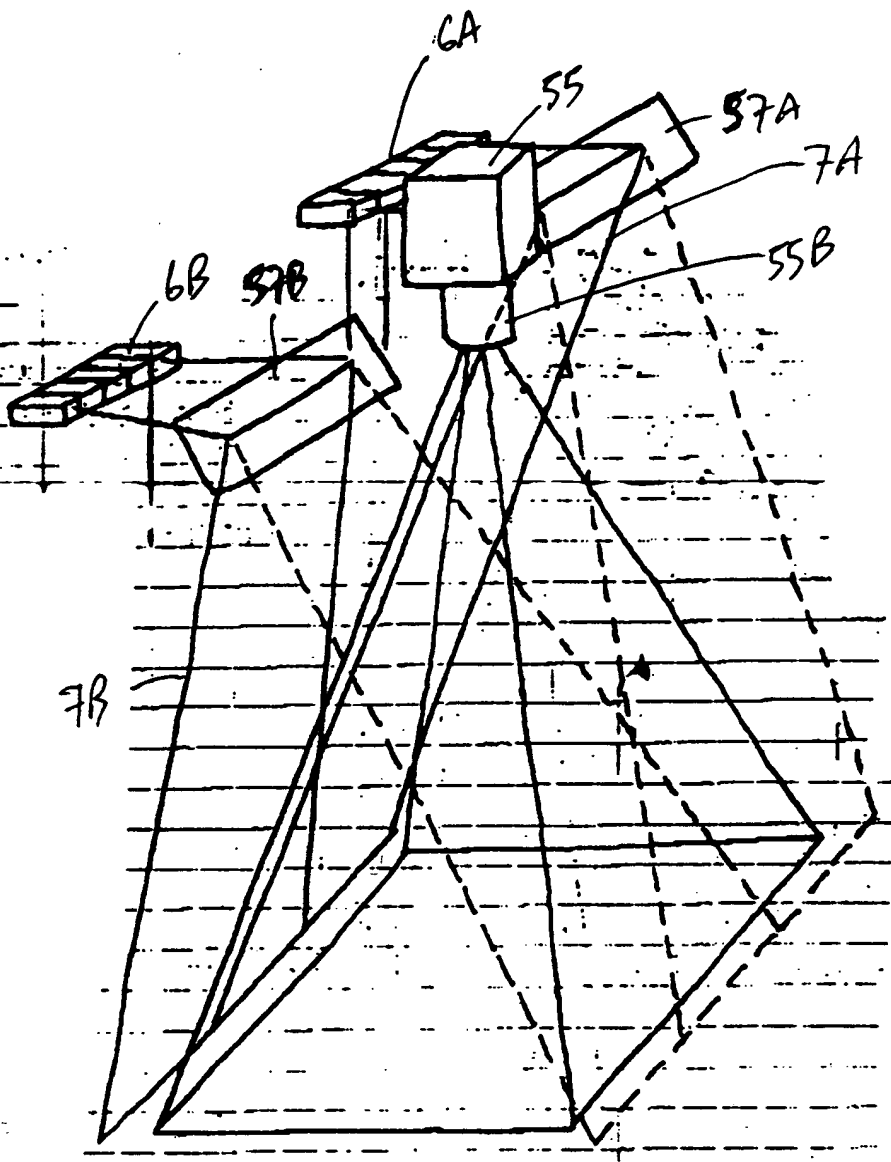


FIG 4A

60 →

92/137



60A

FIG. 4B1

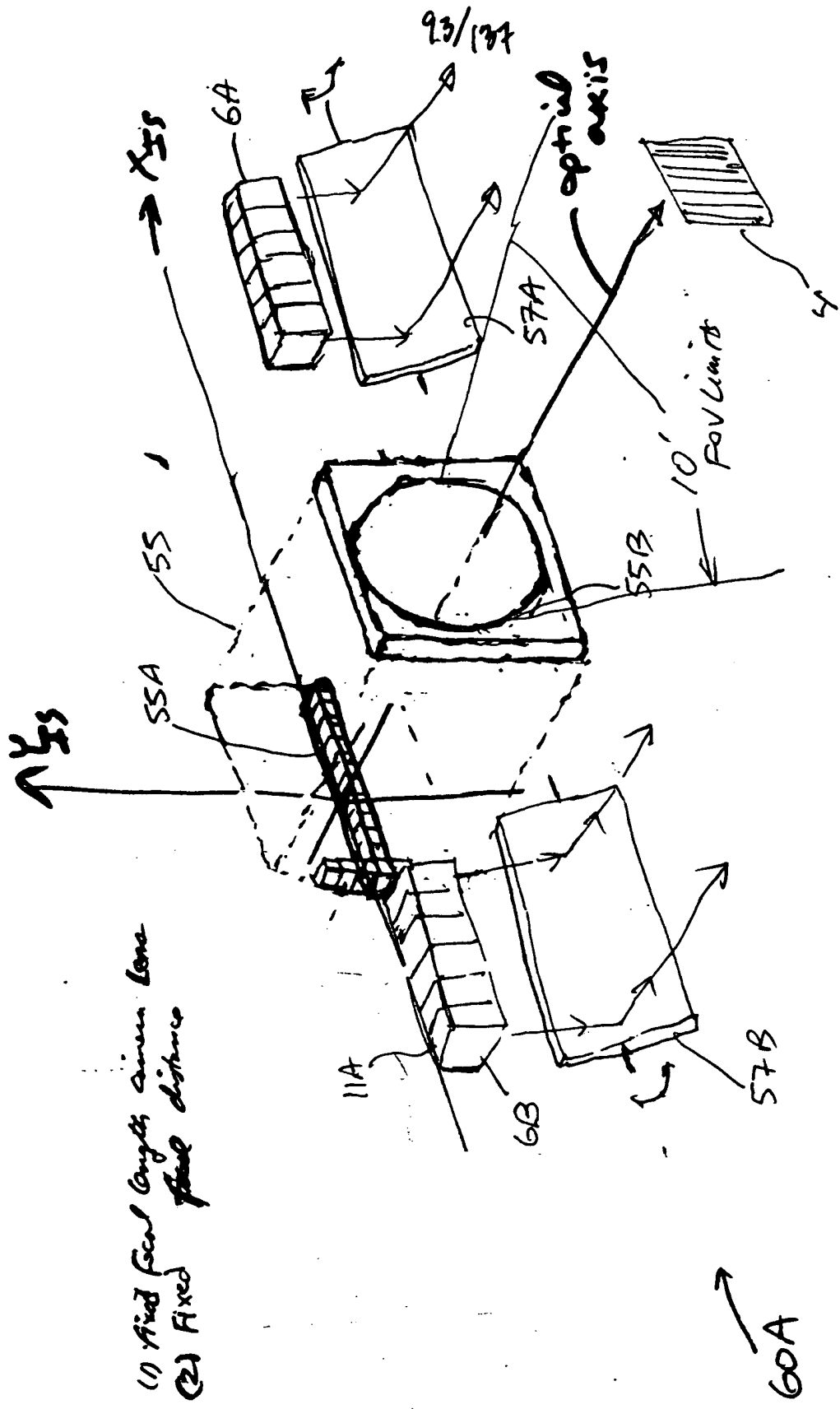


FIG. 4B Z

208210" T506500T

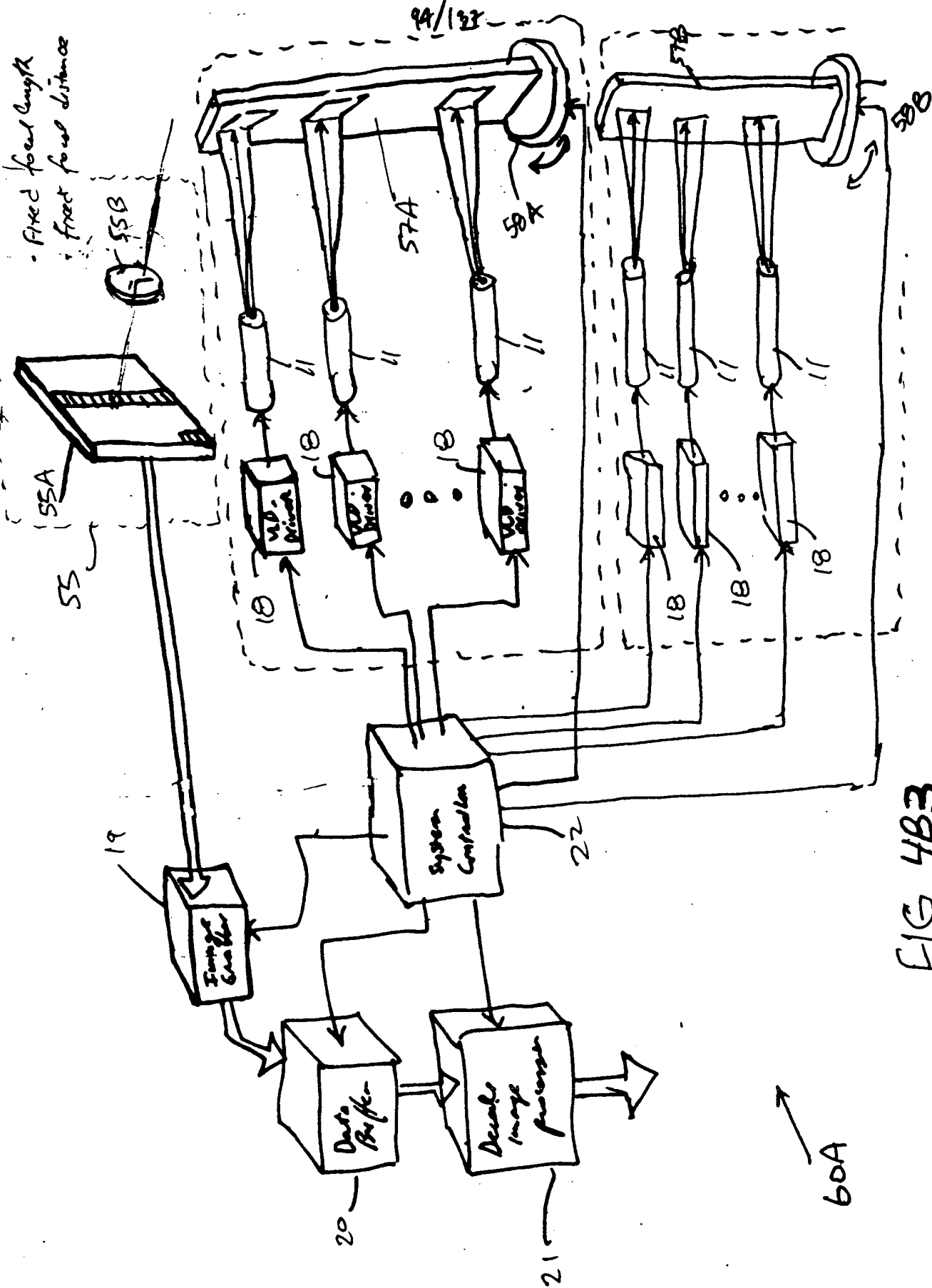


FIG. 4B3

95/137

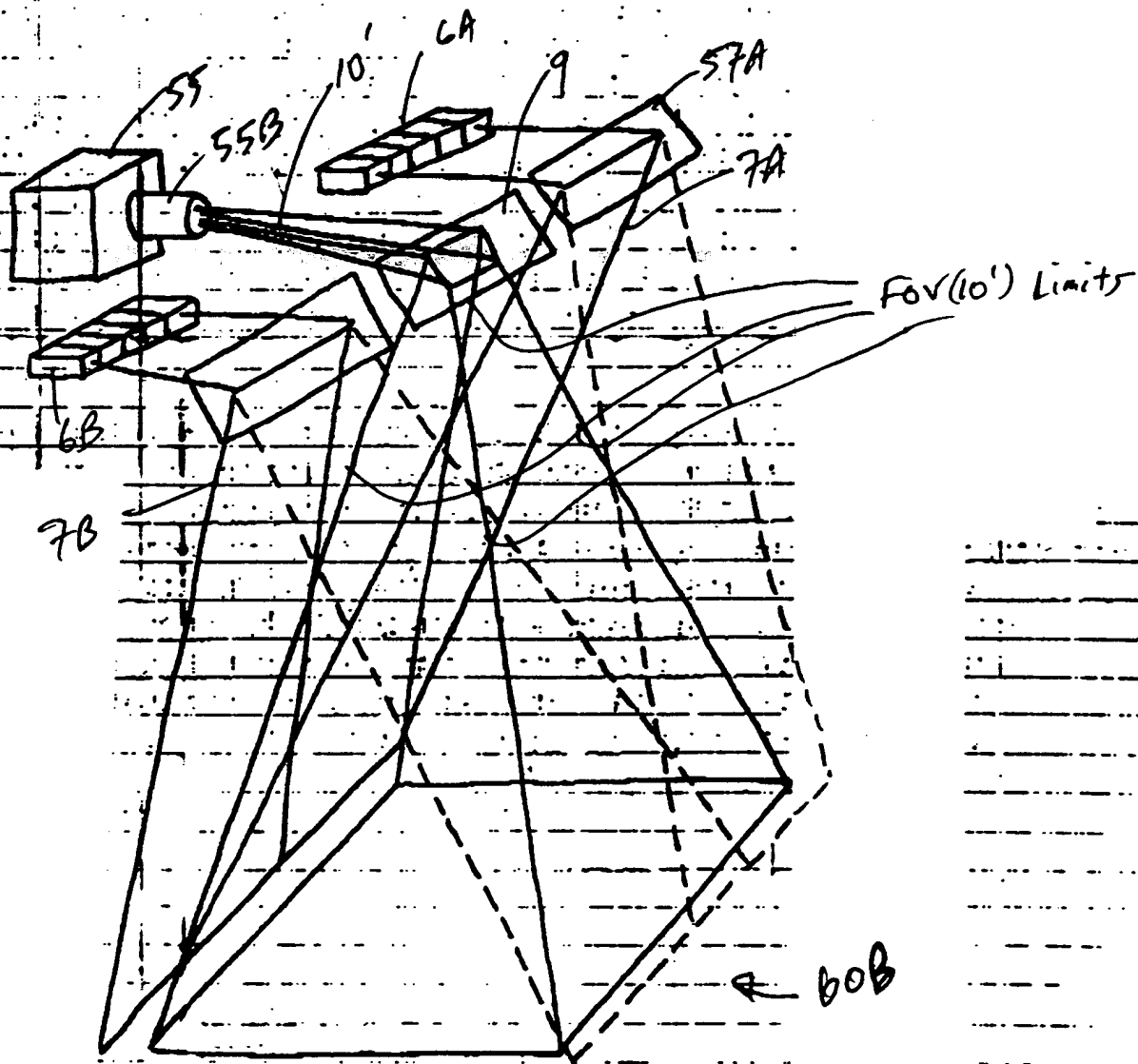
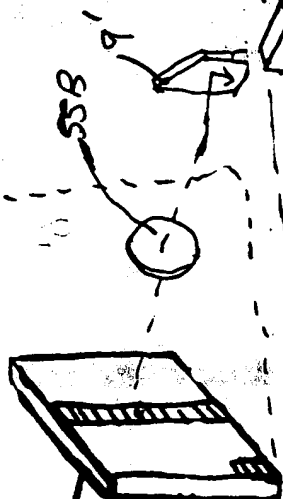


FIG. 4C-L

208210" T506700T

96/192



55B

55

55A

21

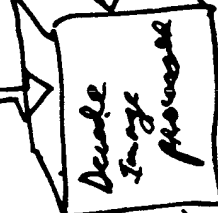


20



22

System Controller



21

Decode Image Processor

60B

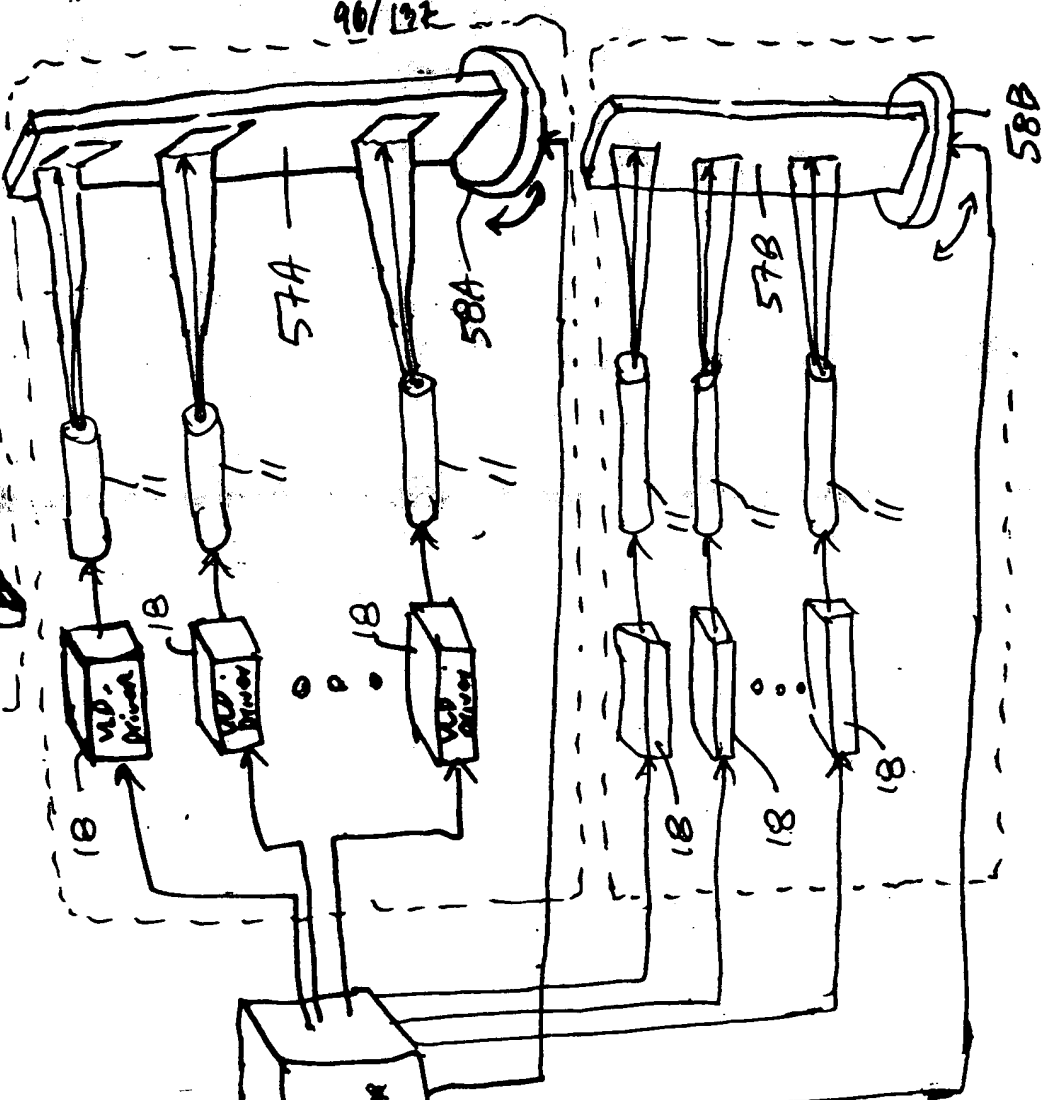


FIG. 4C2

92/102

208210" T506500T

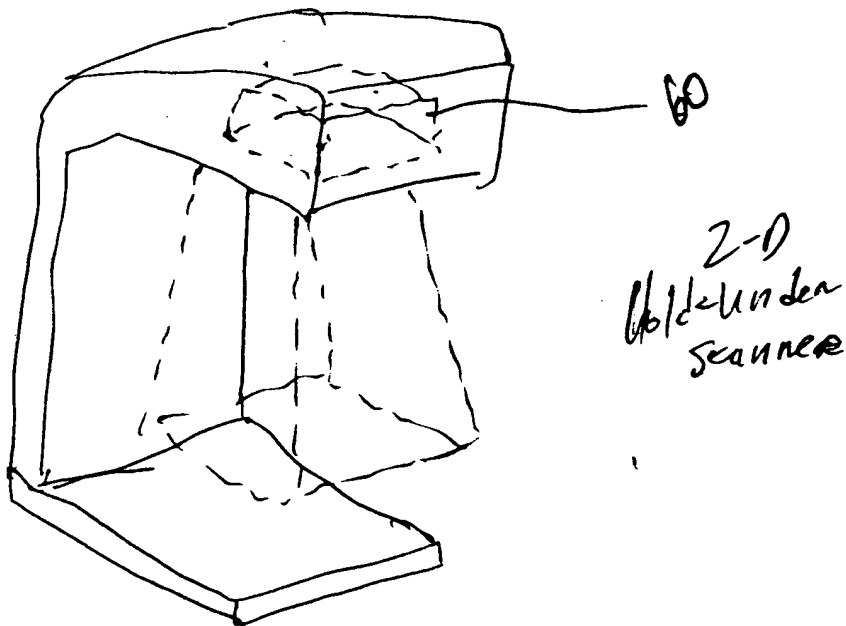


FIG. 4D

5

Plane of
laser :
Illumination

For Limits 10

FIG. 4E

Applications:

- Hand-held Scanner
- Presentation Scanner

000

000

208210" T506500T

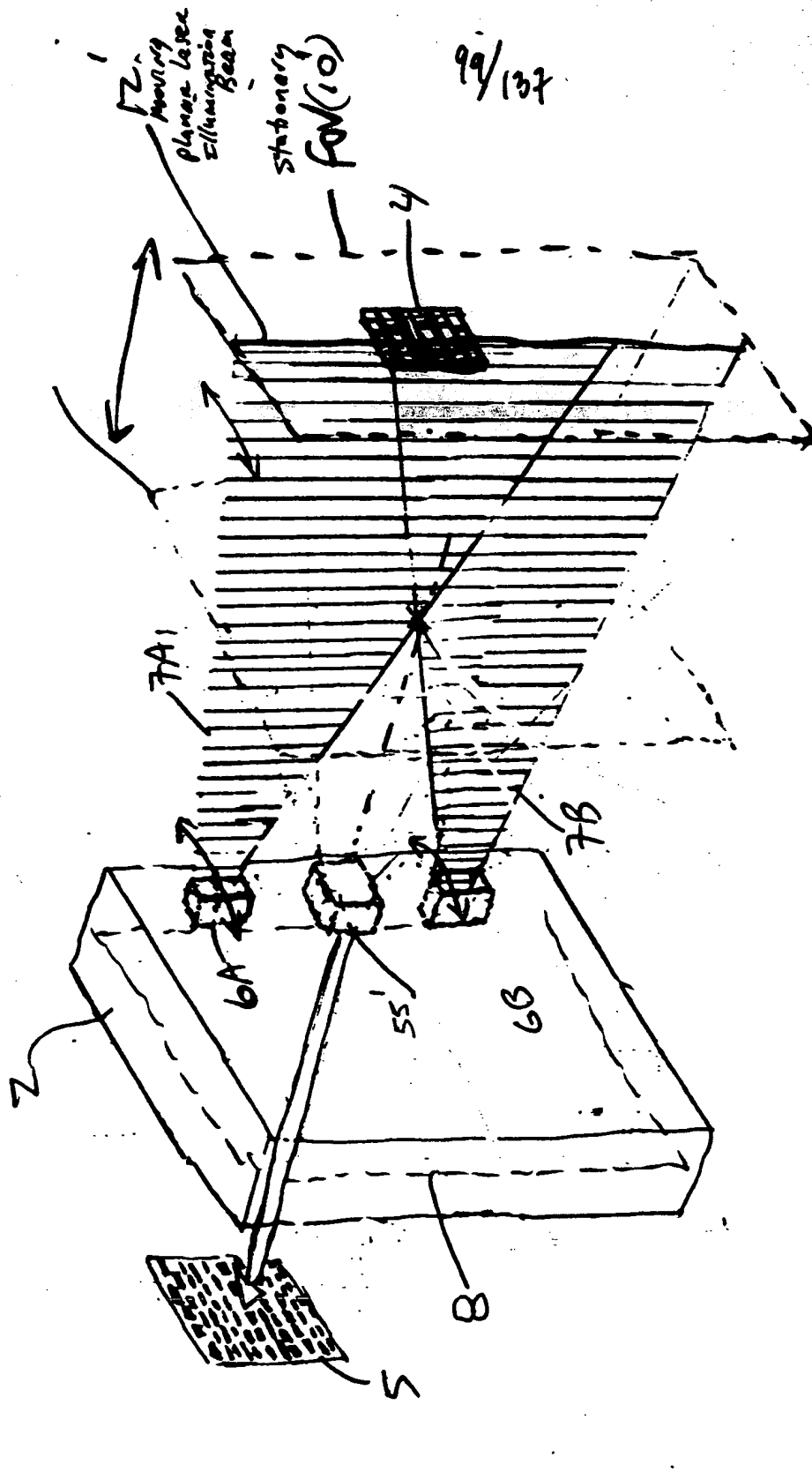


FIG 5A

208270-T506500T

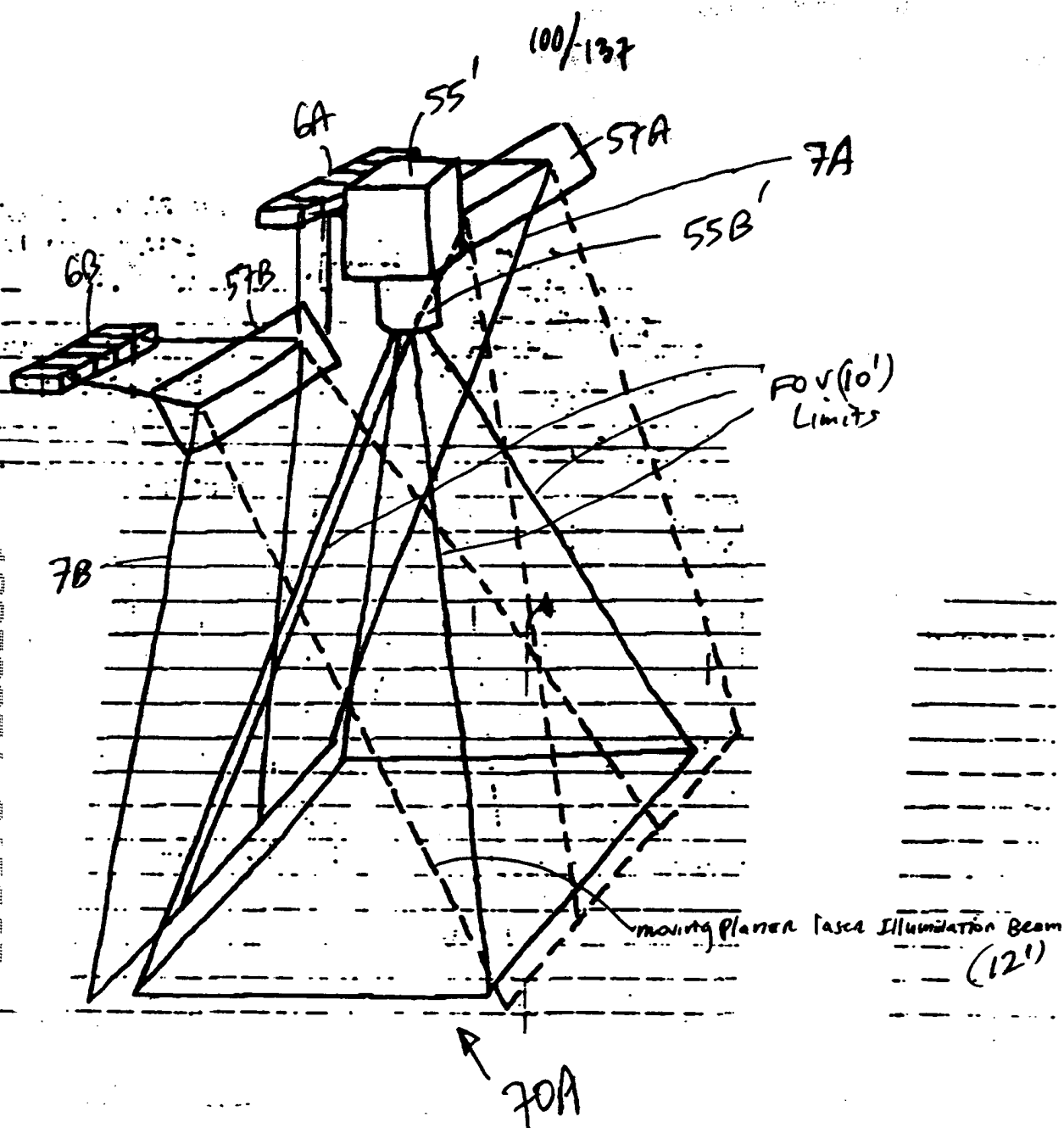


FIG 5B1

10

10

208270" T506S00T

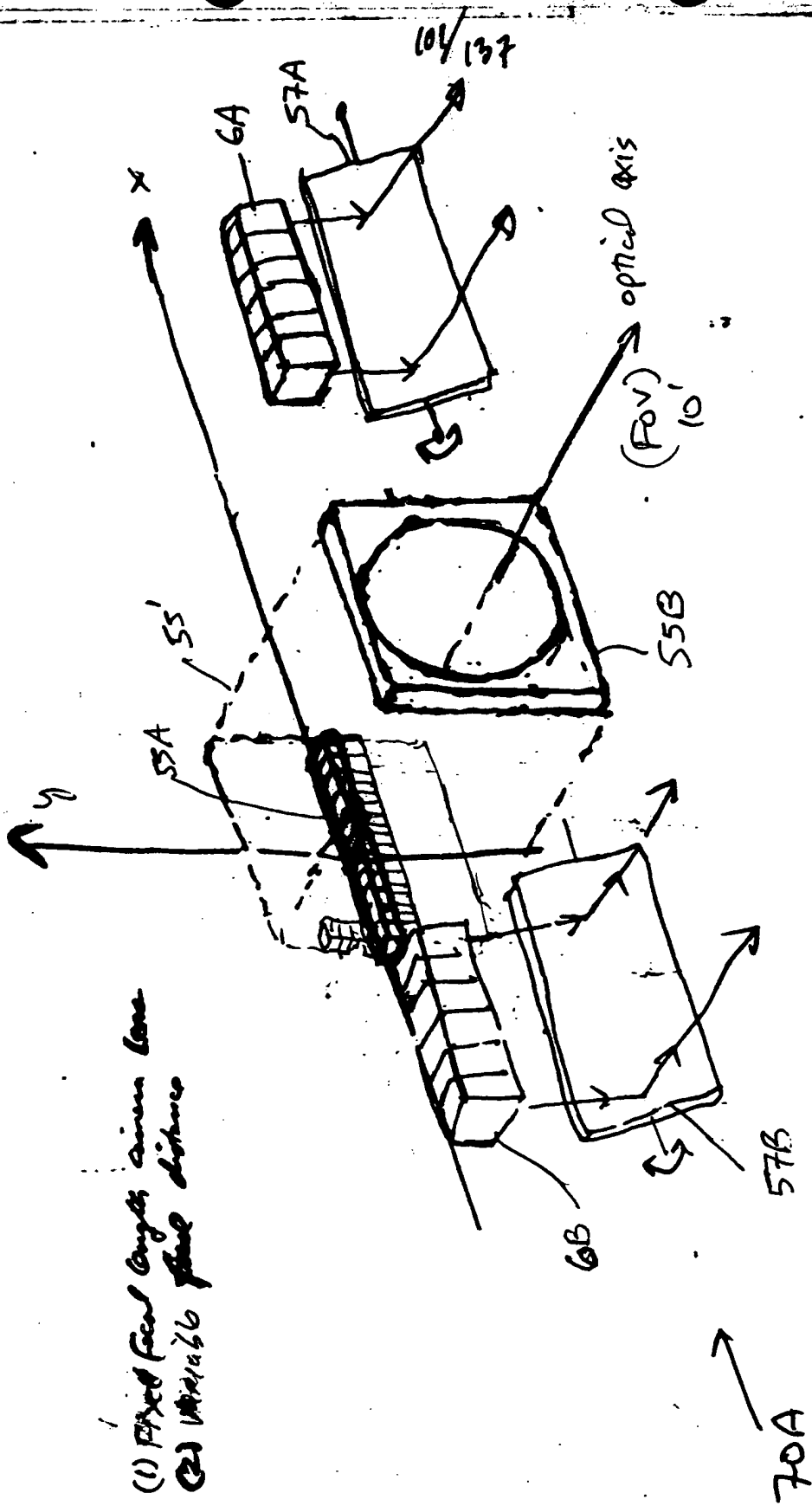


FIG. 5B2

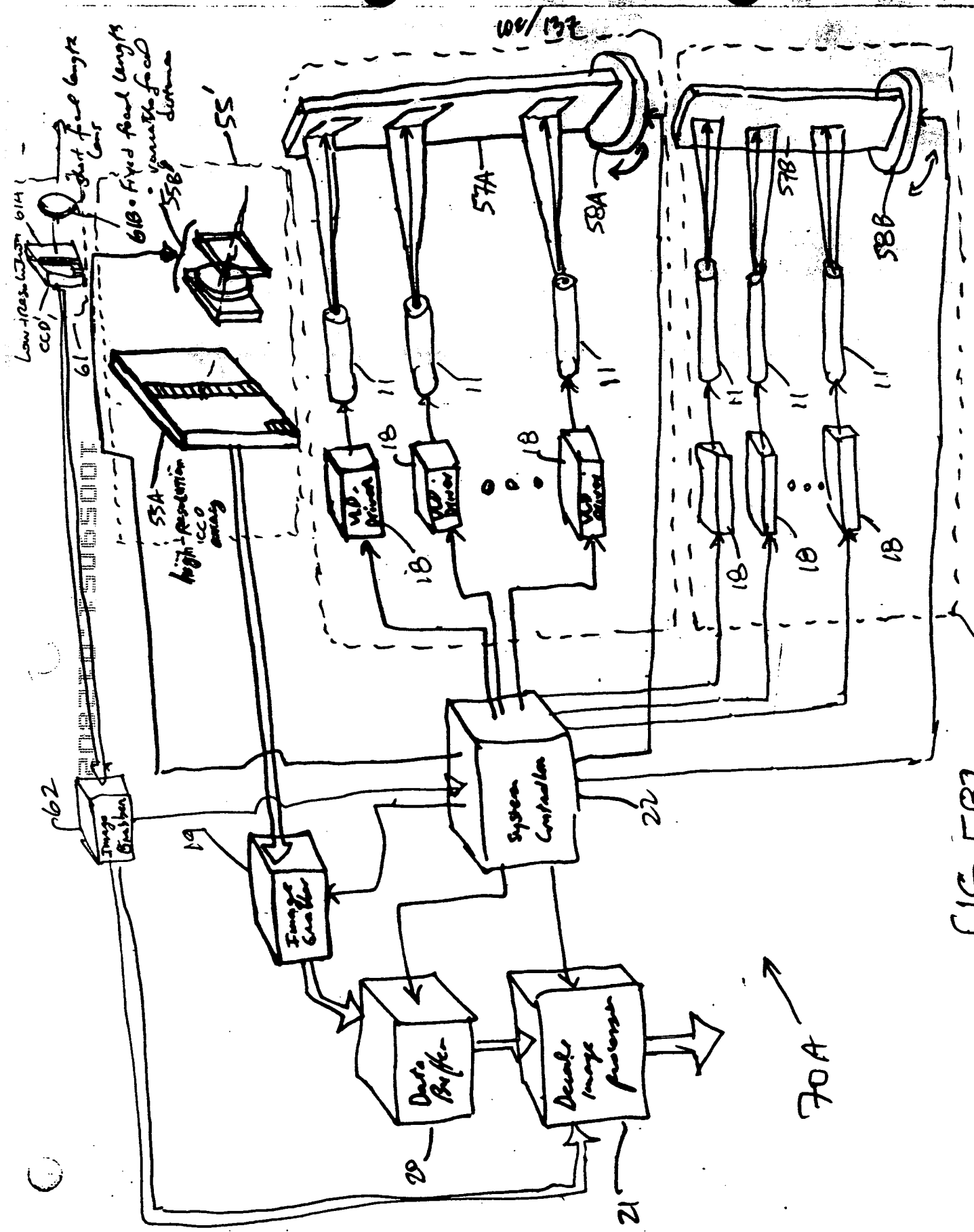


FIG. 5B3

6

208210 T506500T

103/137

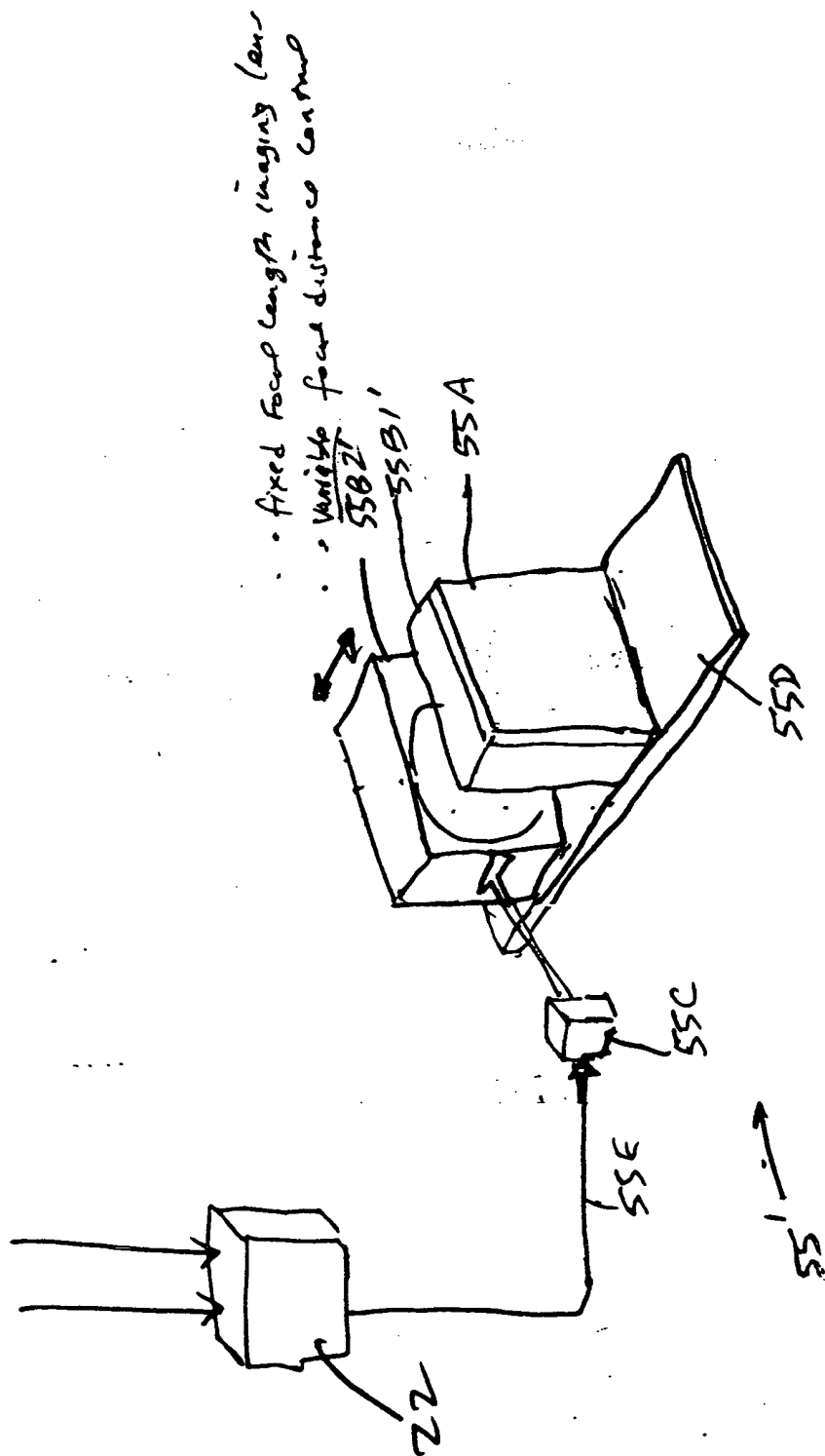


FIG. 5B4

104/137

208270 15065007

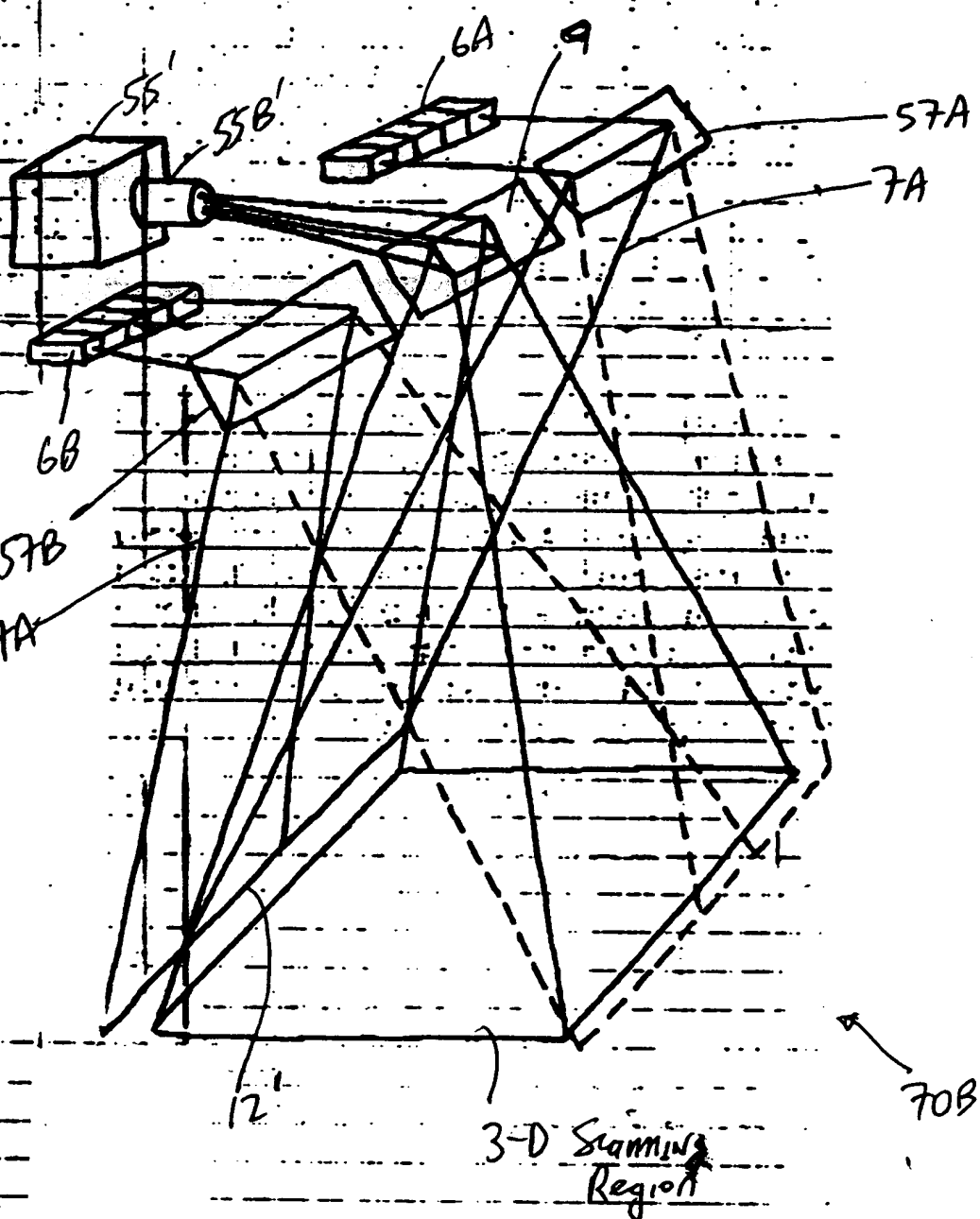


FIG. 5C1

(1) Variable focal length lens
(2) Fixed fluid distance

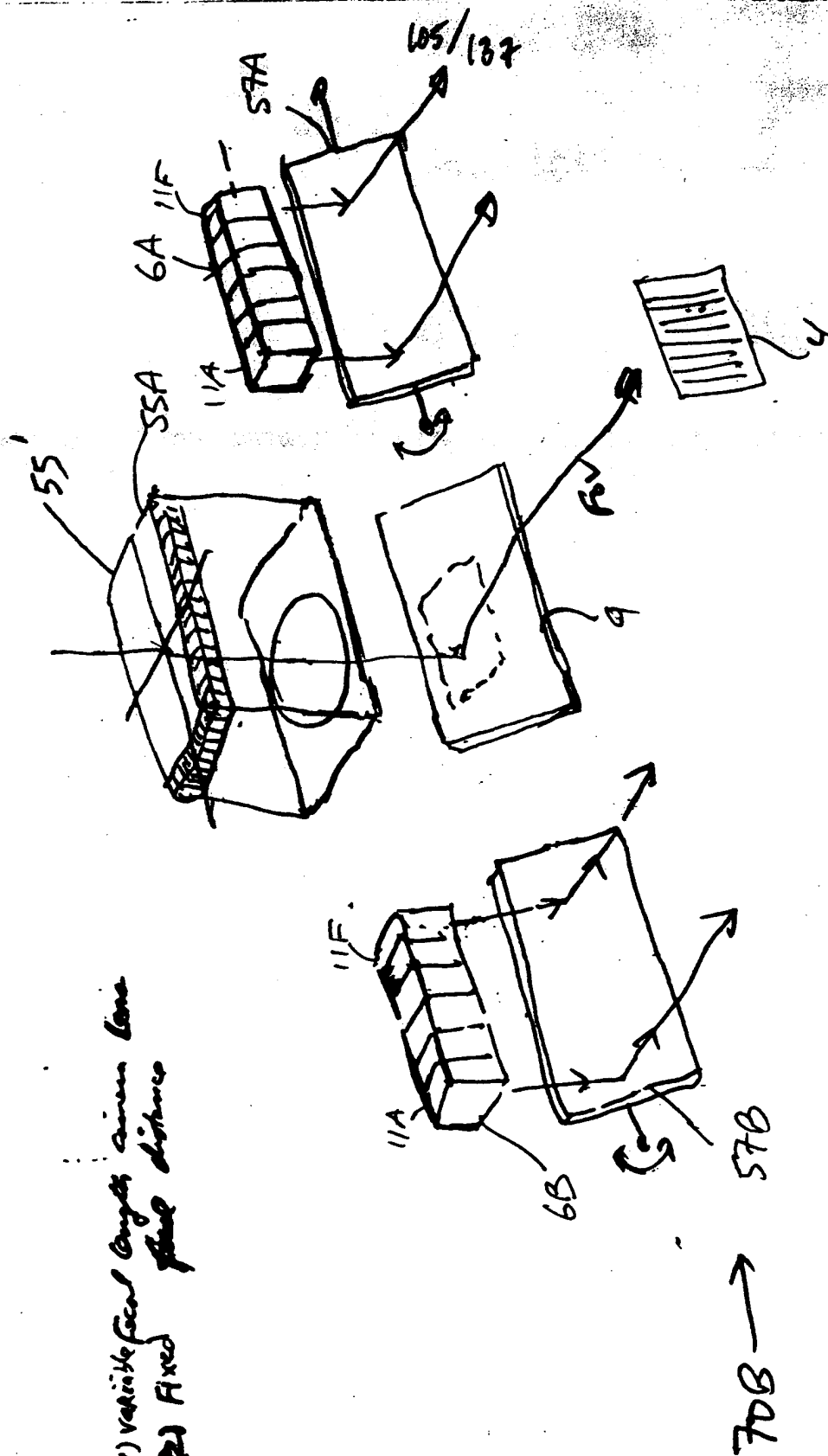


FIG. 5C2

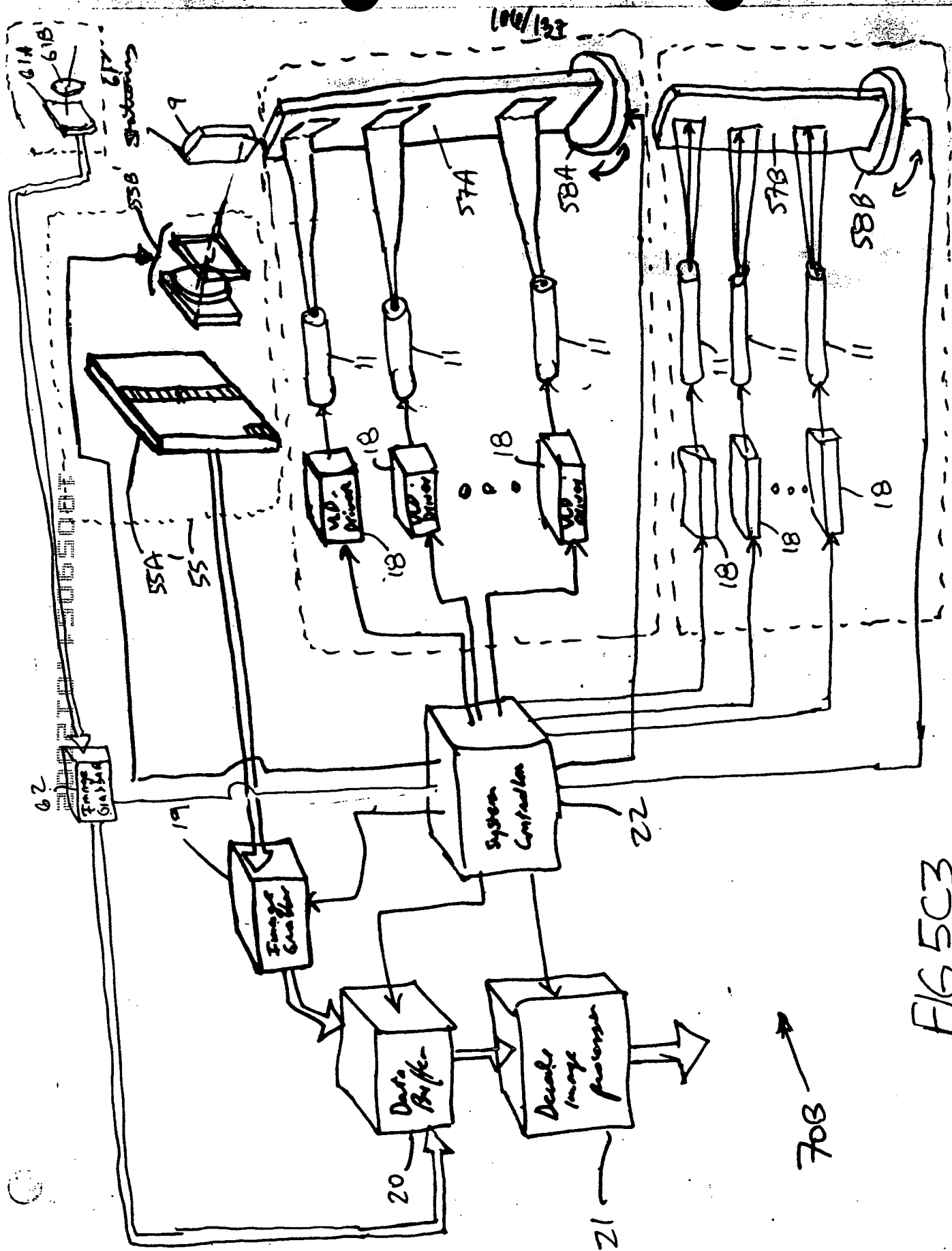


FIG. 5C3

208210" T506500T

107/137

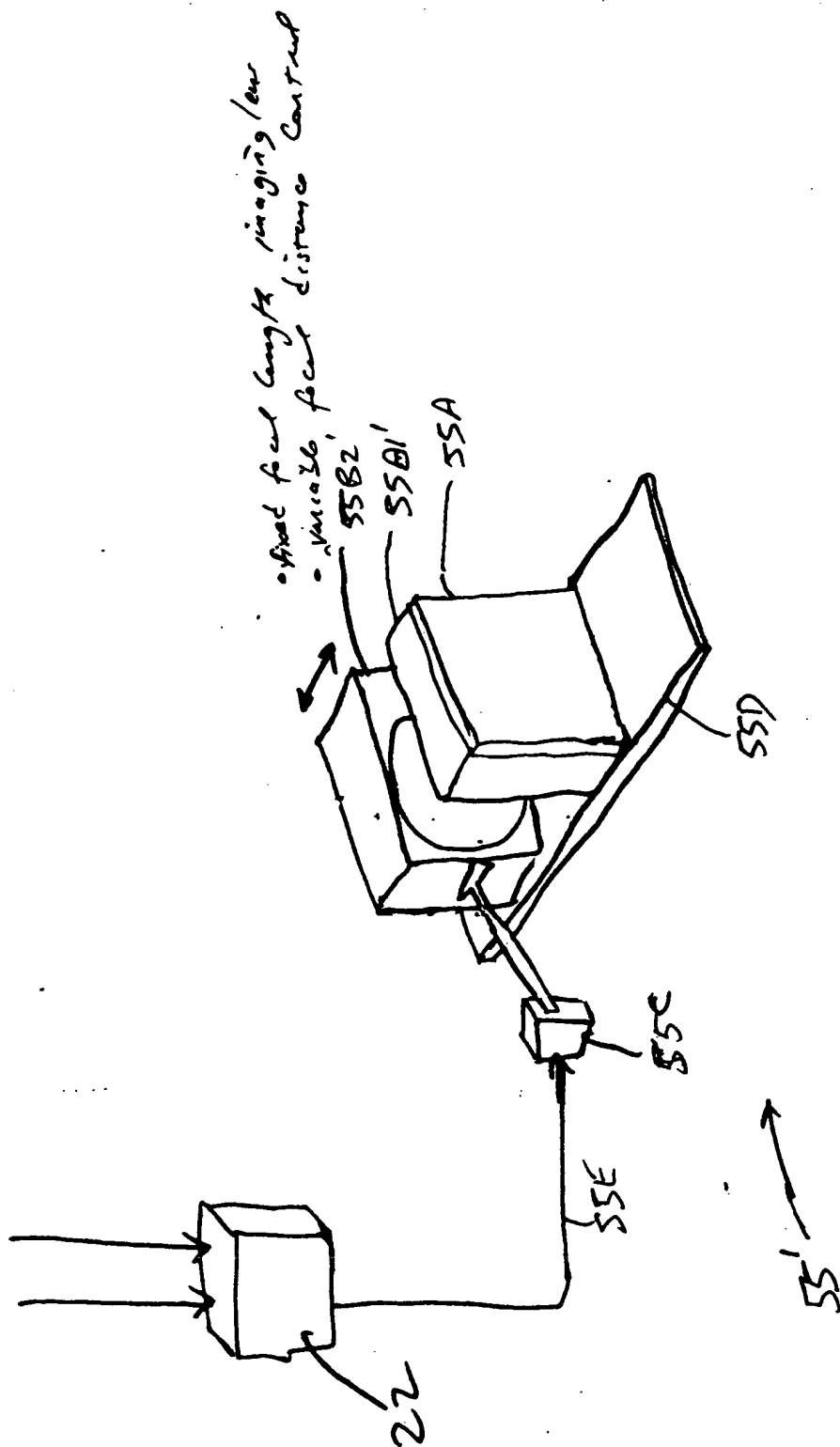


FIG. 5C4

109/137

208270 T506500T

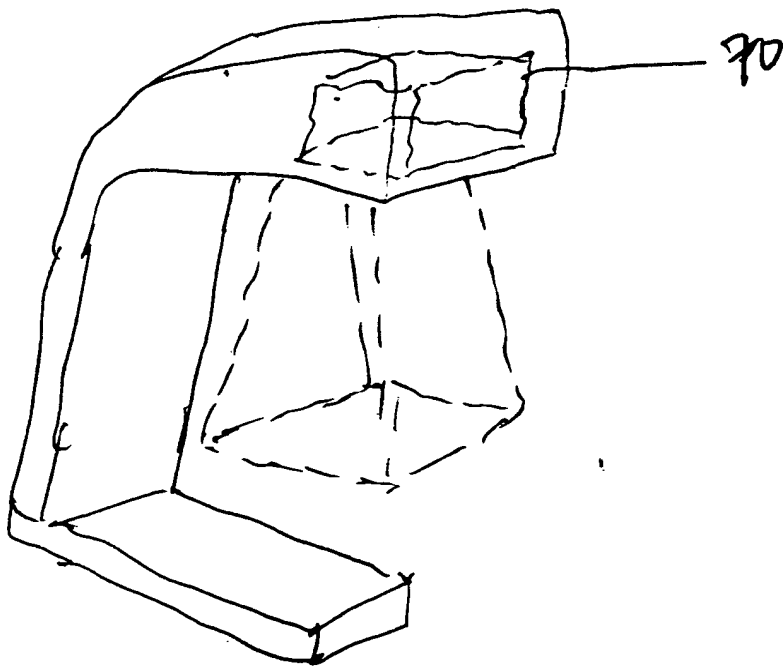


FIG. 5D

00

208210" T506500T

30

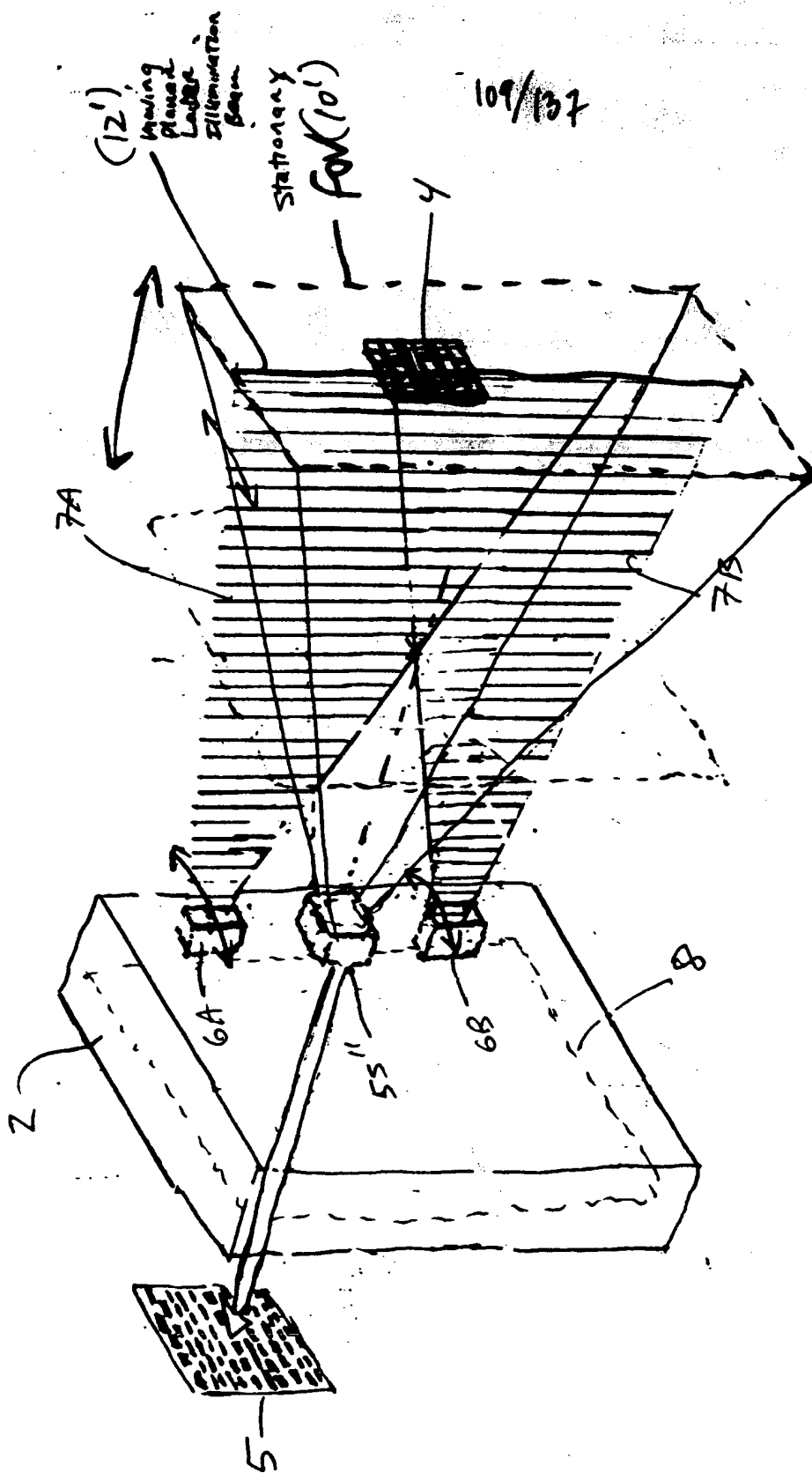


FIG. 6A

2082FO"TS06500T

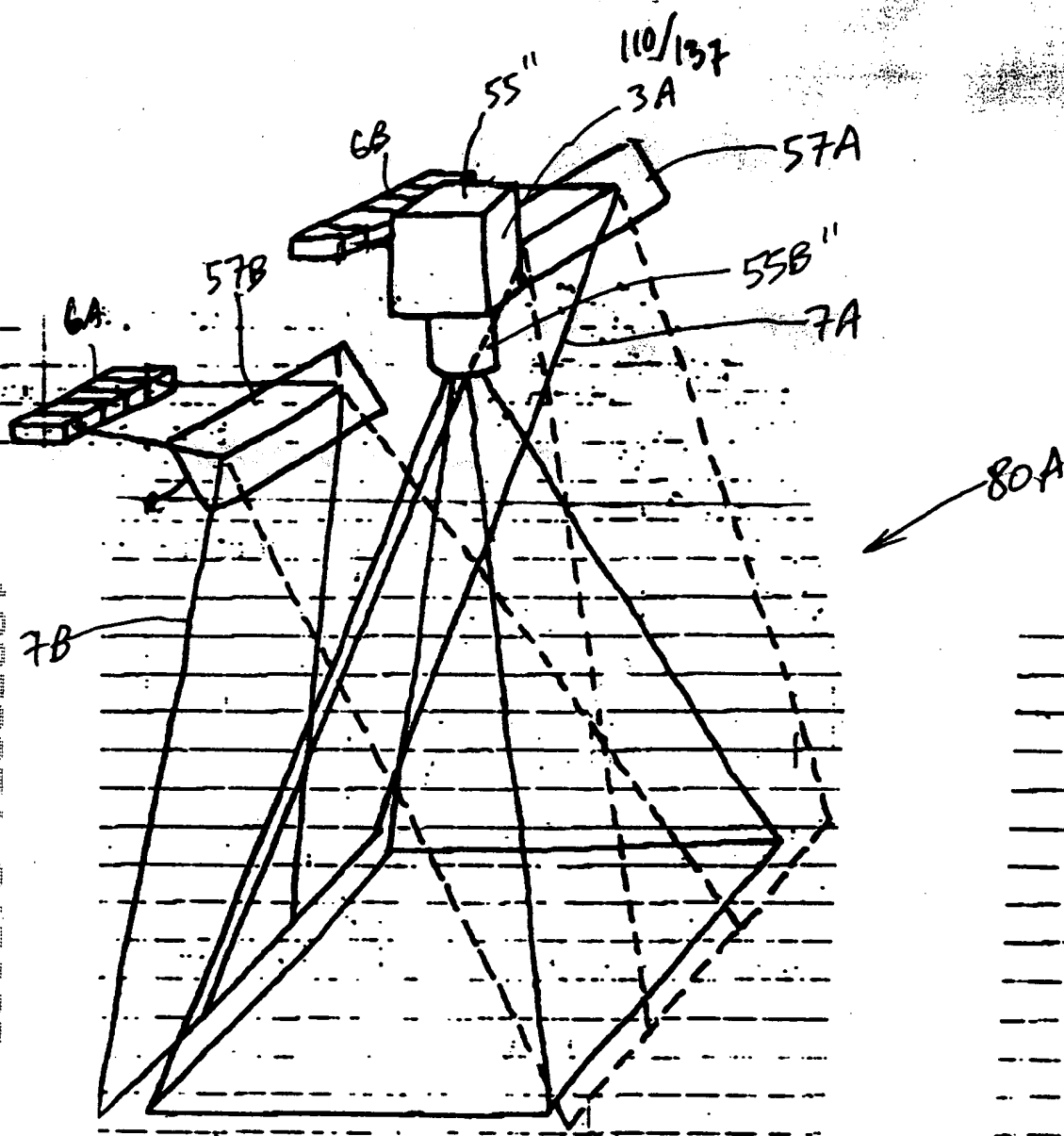
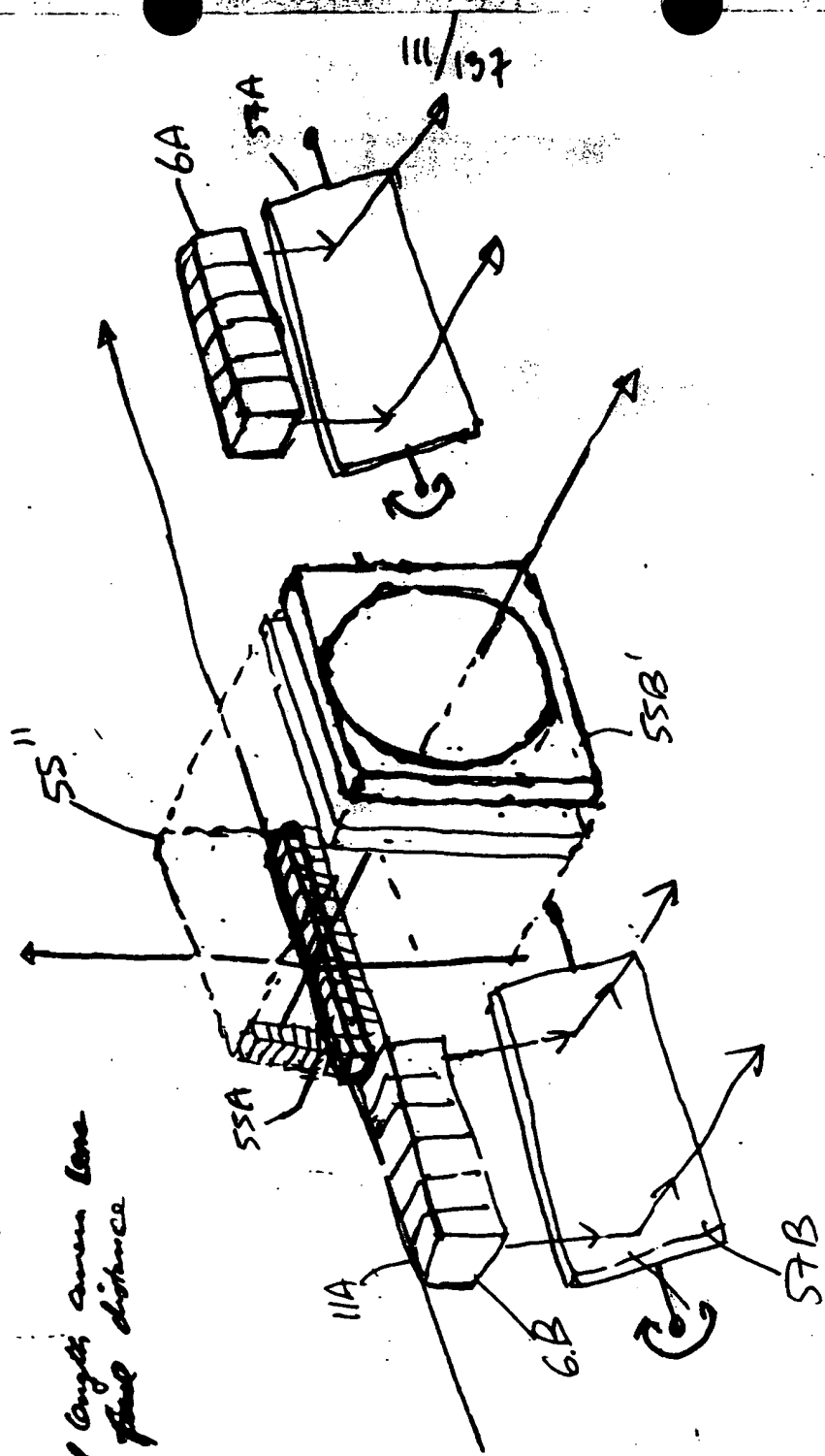


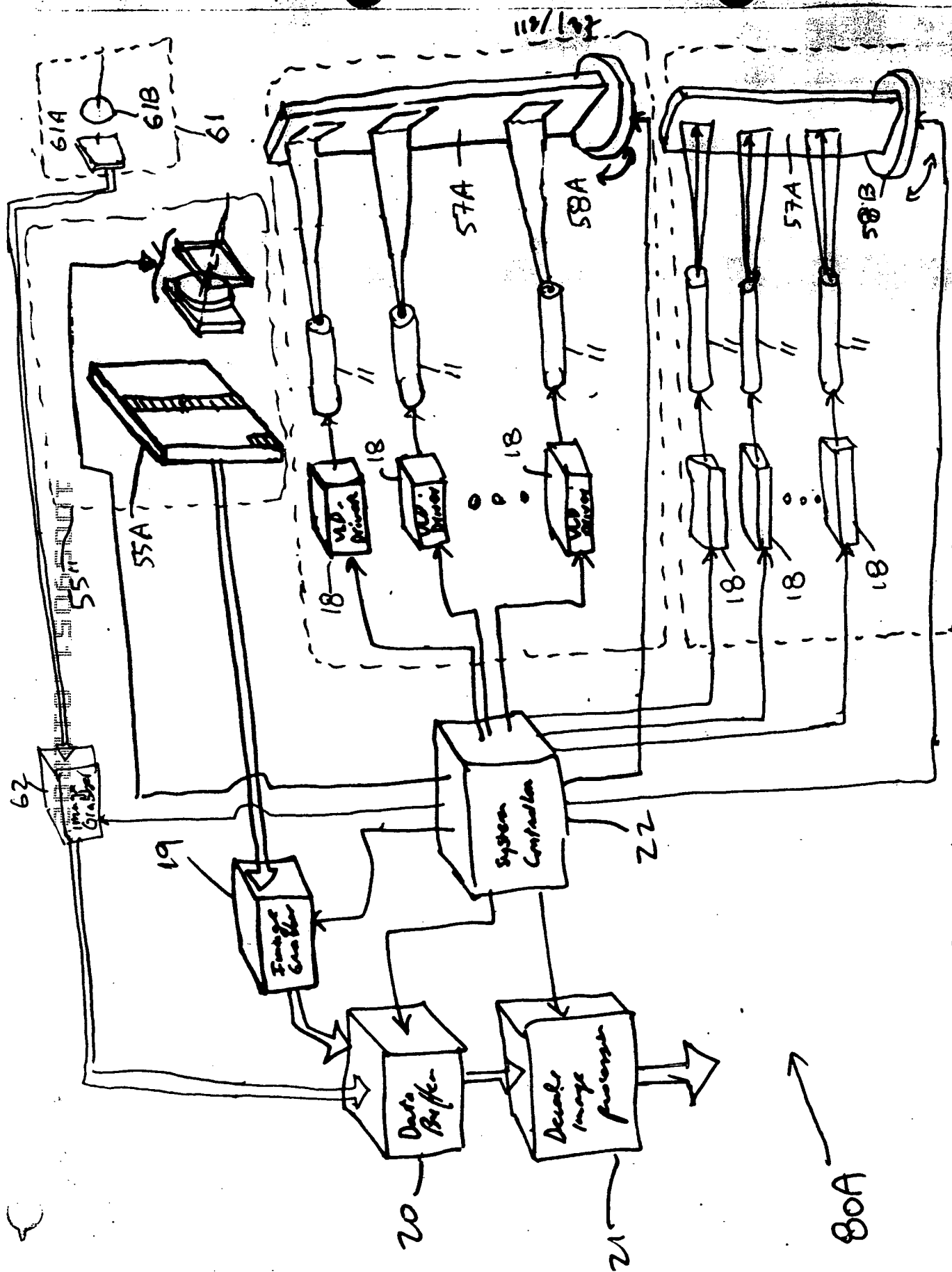
FIG. 6B1



(1) Variable length annular lens
(2) Variable fluid distance

FIG. 6B2

80A



80

C

2003210" T506500T

11/9/197

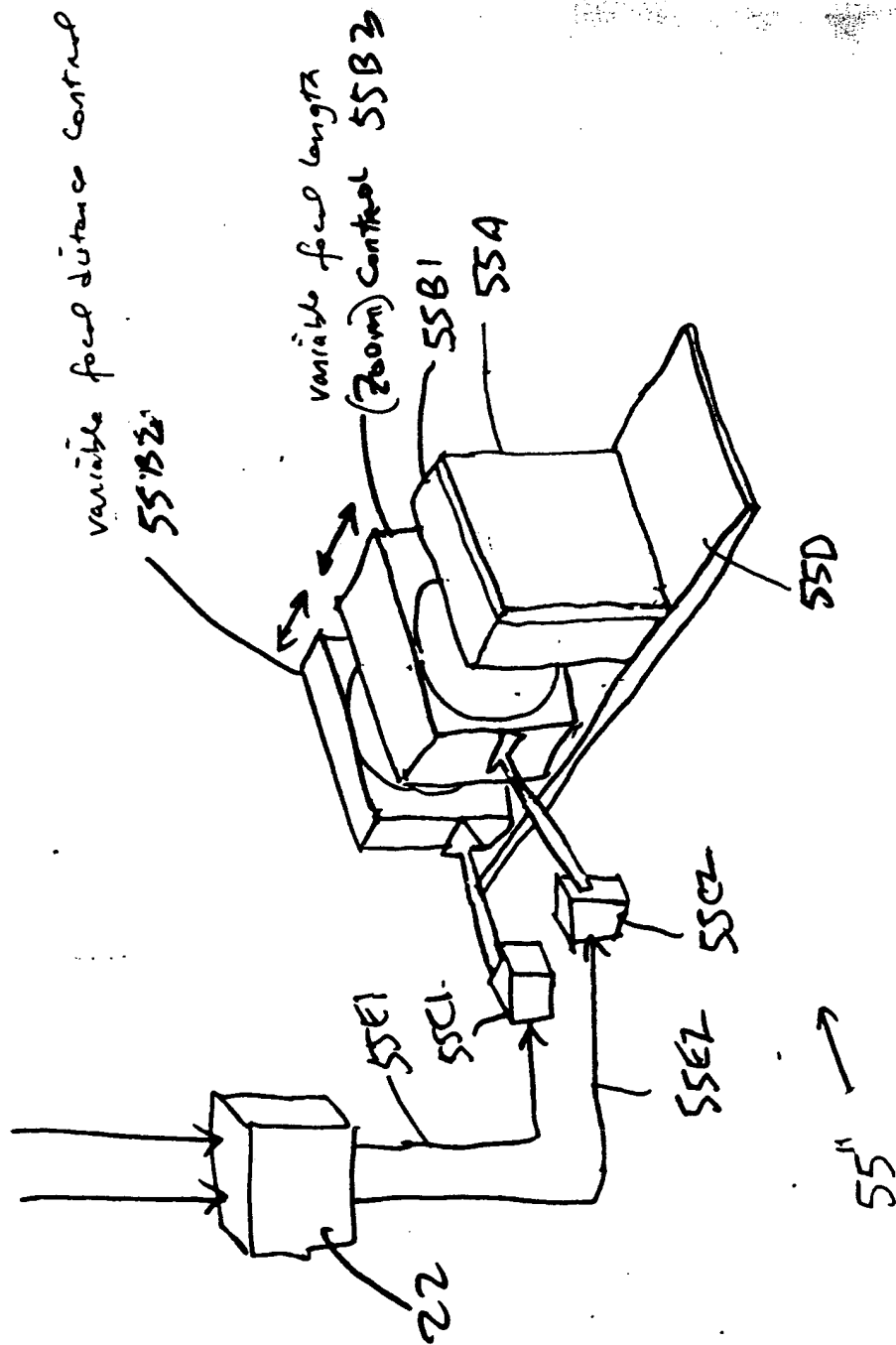


FIG. 6B4

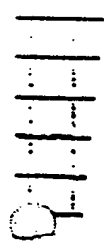
[illegible]

FIG. 6C1

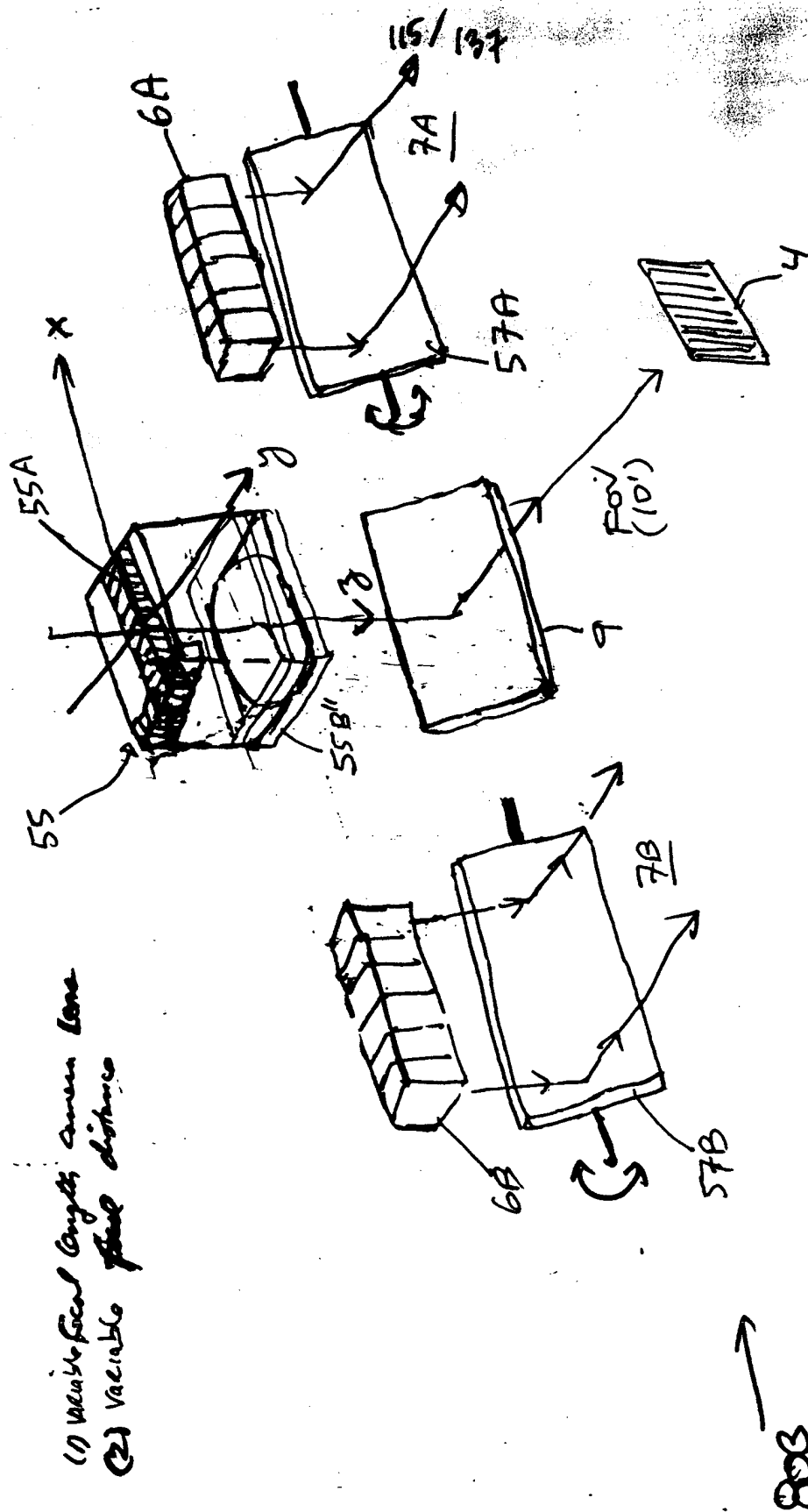


FIG. 6C2

- (1) Variable focal length lens
- (2) Variable fluid distance

803

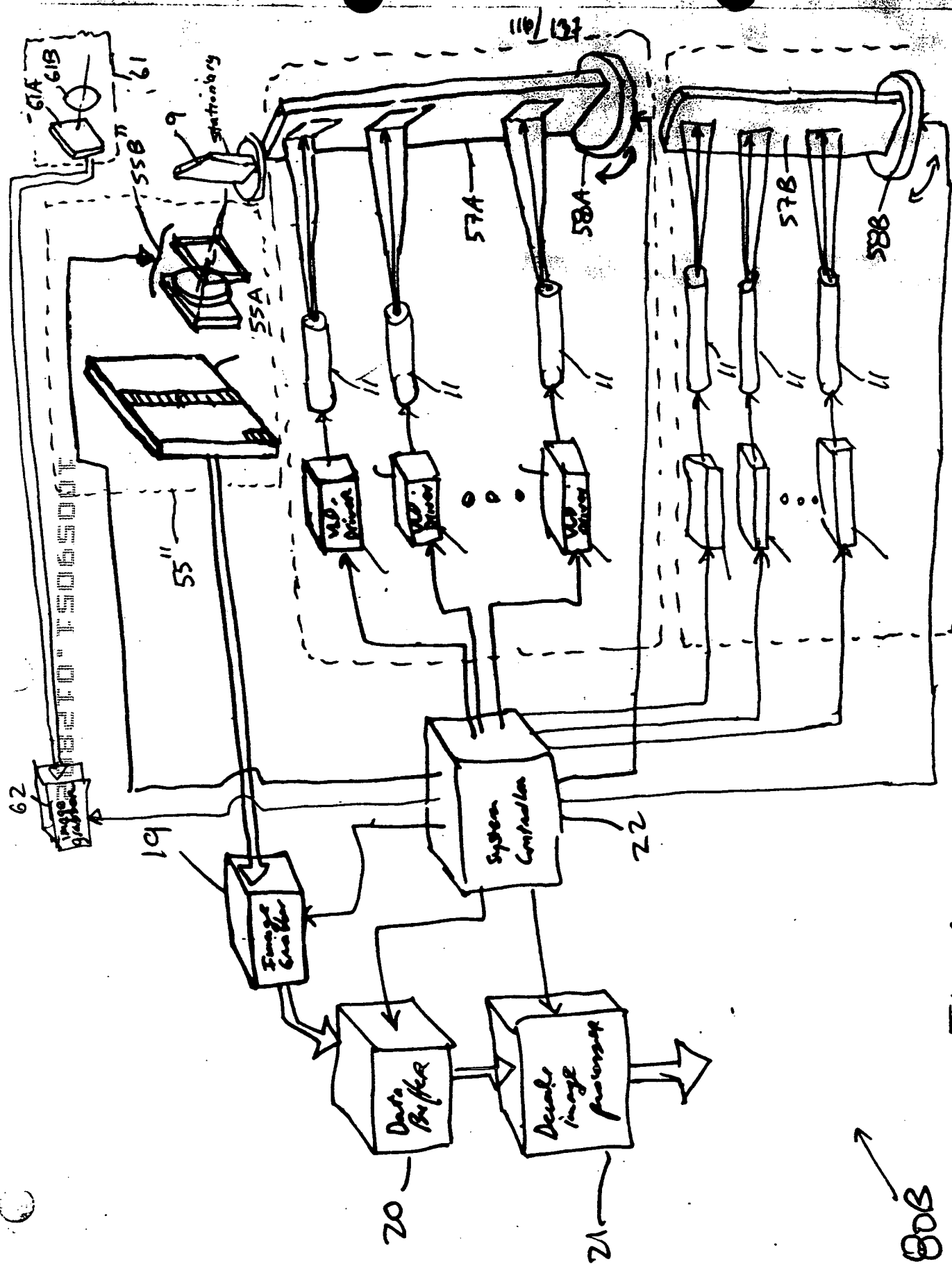


FIG. 6C3

00

208270 T5065007

00

117/137

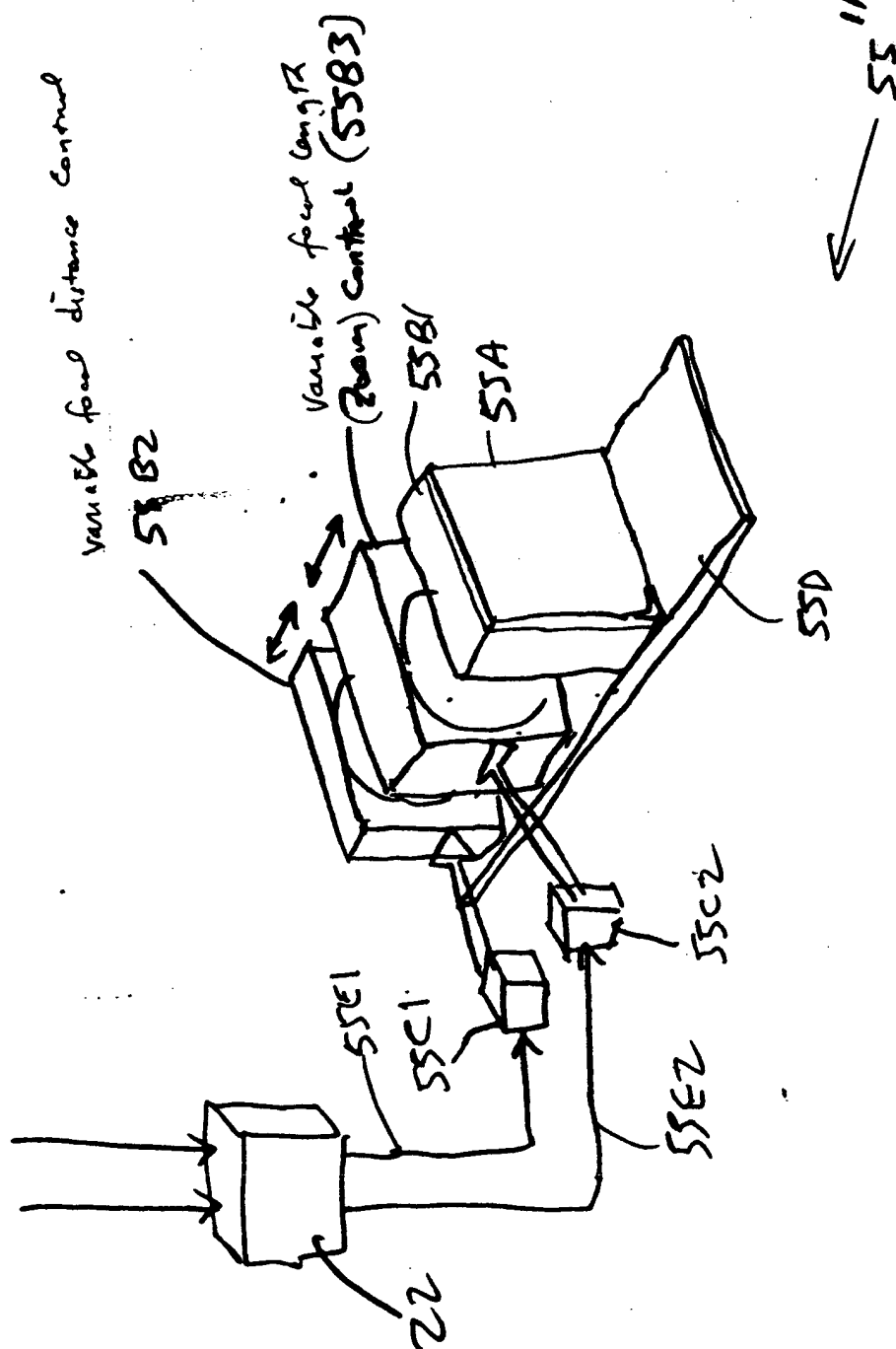


FIG. 6C4

118/137

208270" T506500T

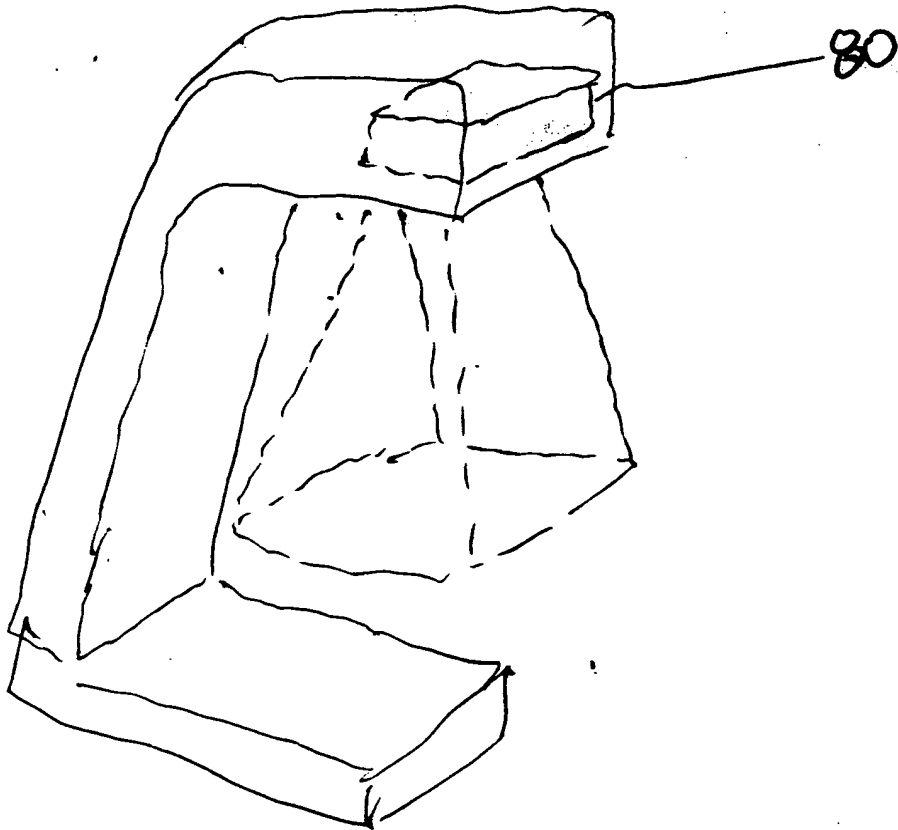


FIG. 6D

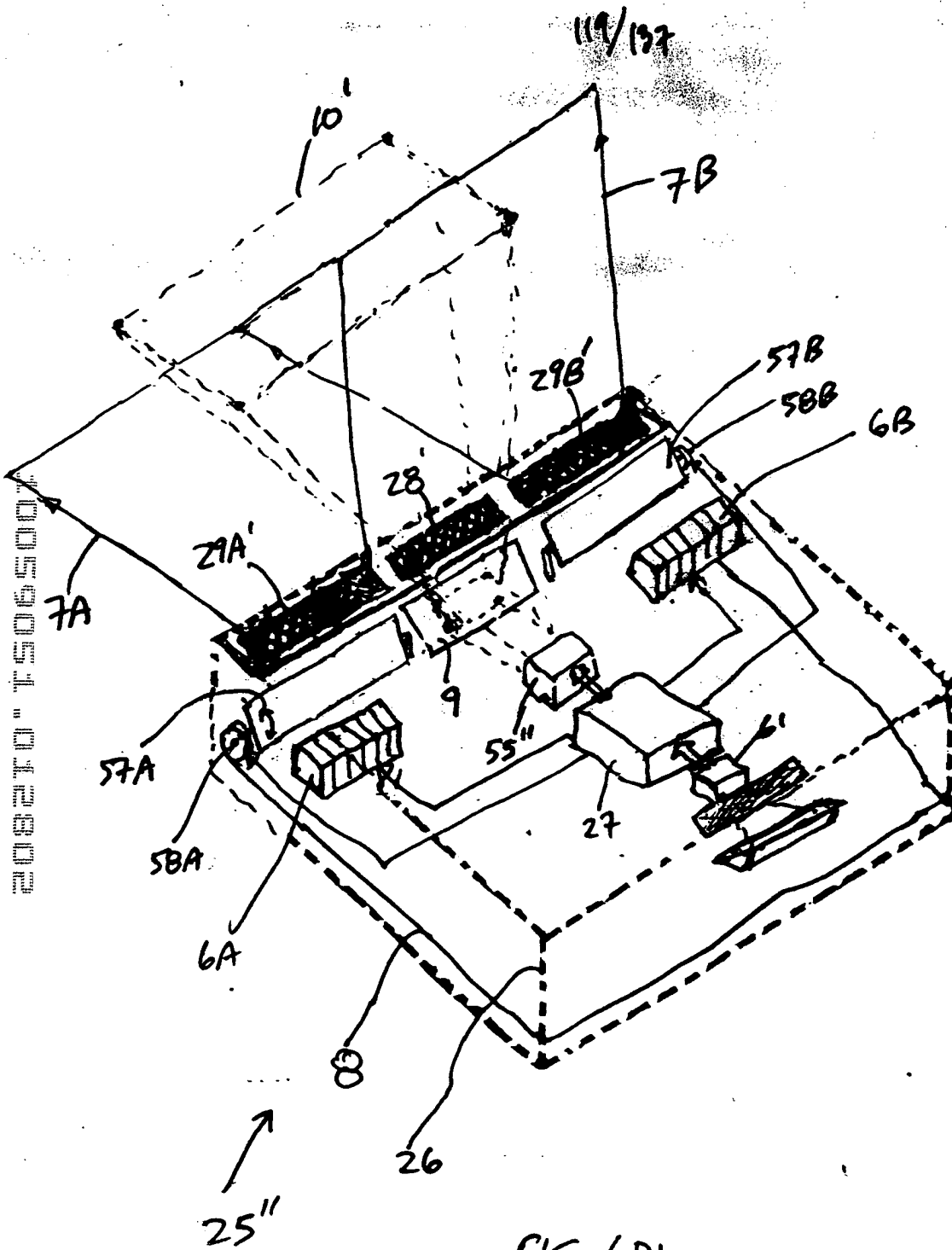


FIG. 6D1

120/137

208210" T506500T

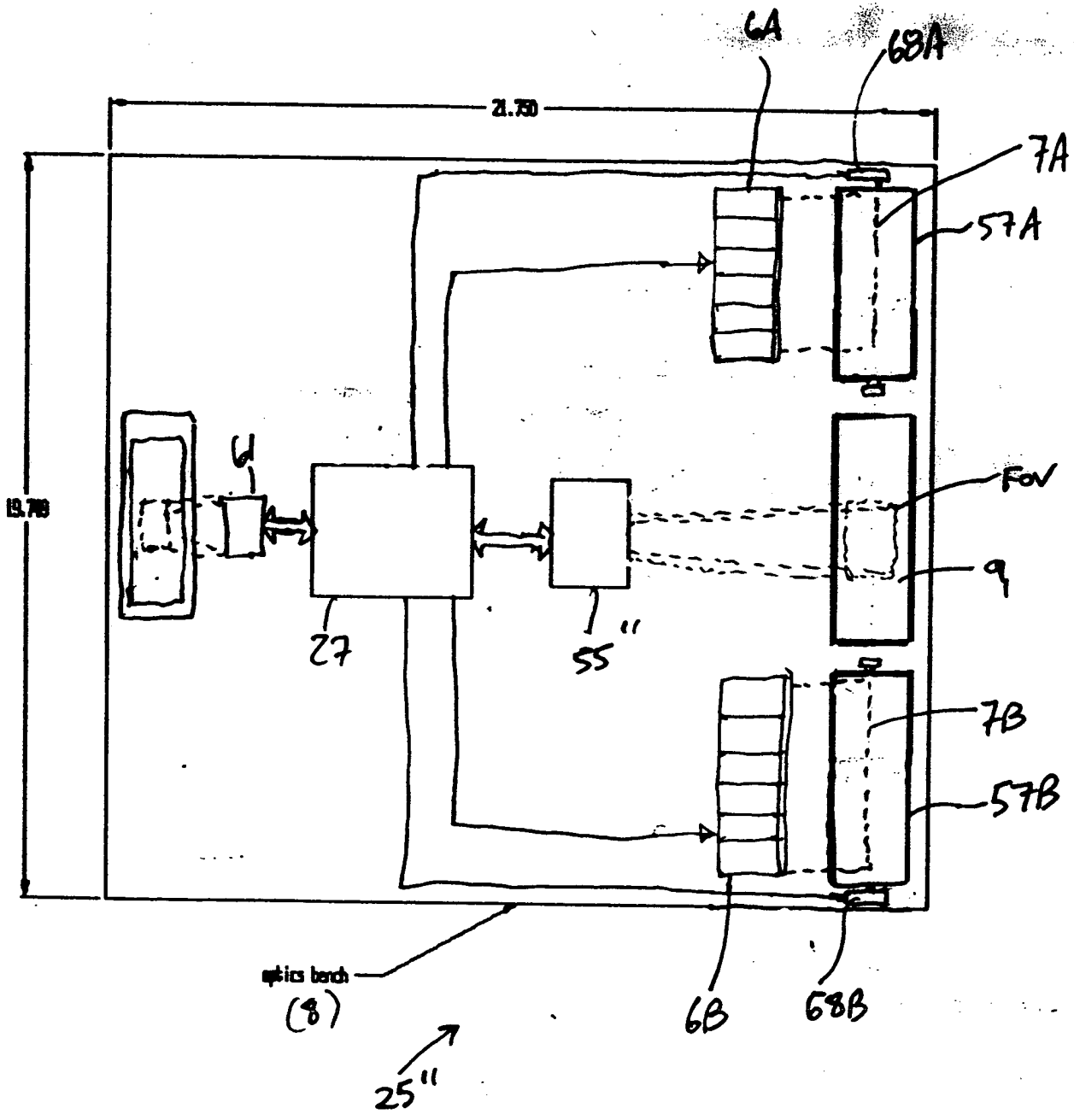
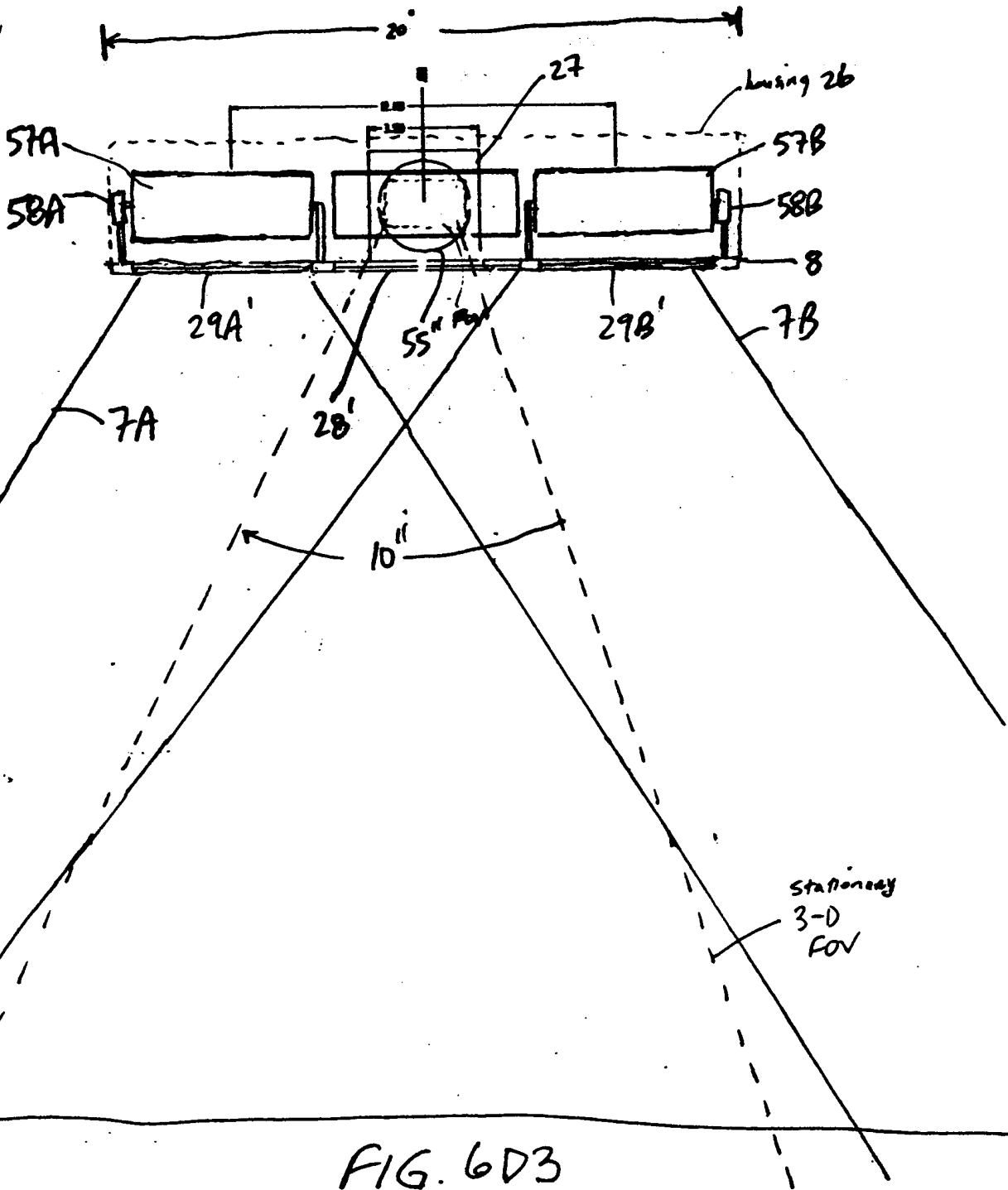


FIG. 6D2

121/137



208270 T506500T

FIG. 6D3

122/137

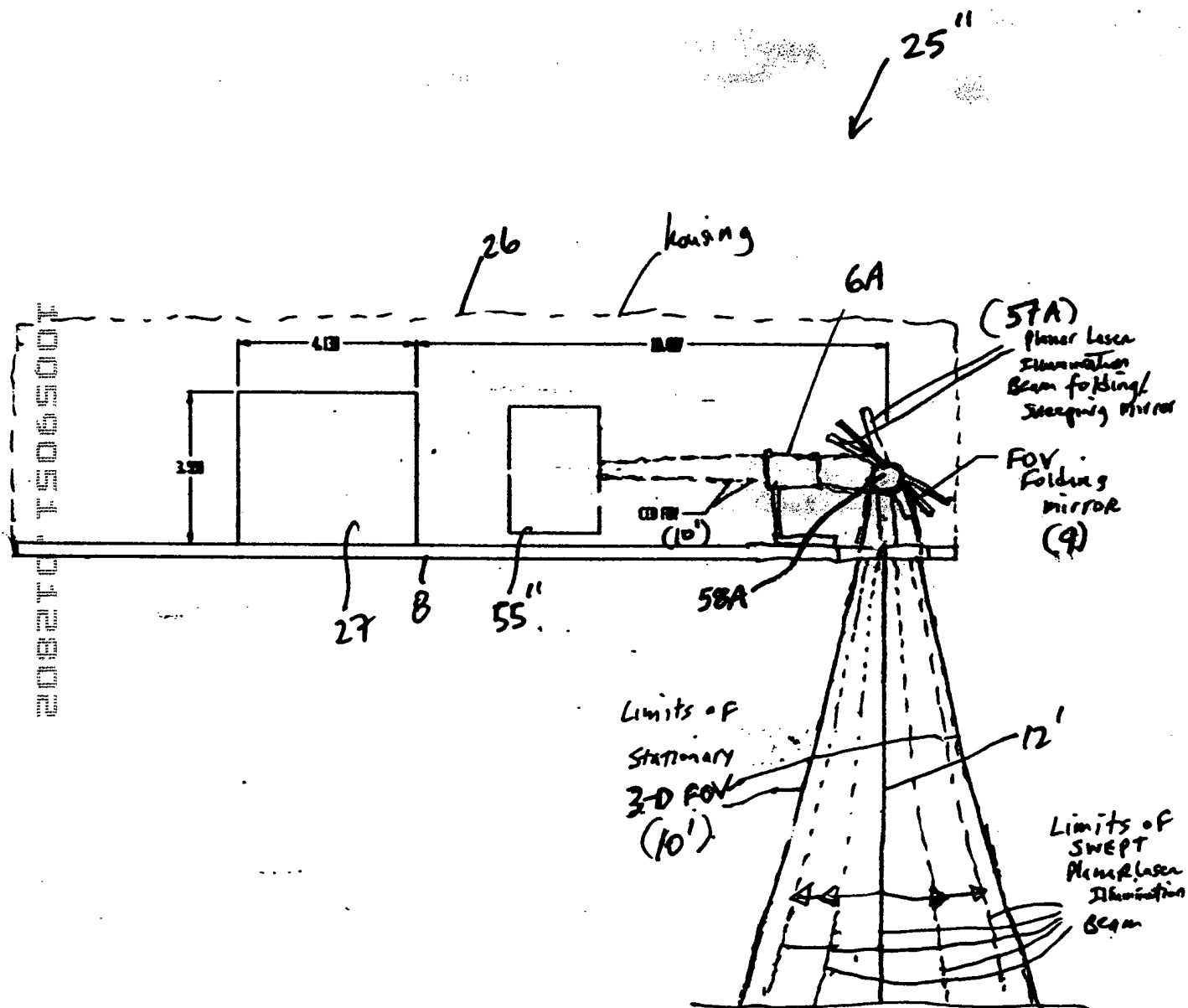


FIG. 6D4

123/137

variable FOV

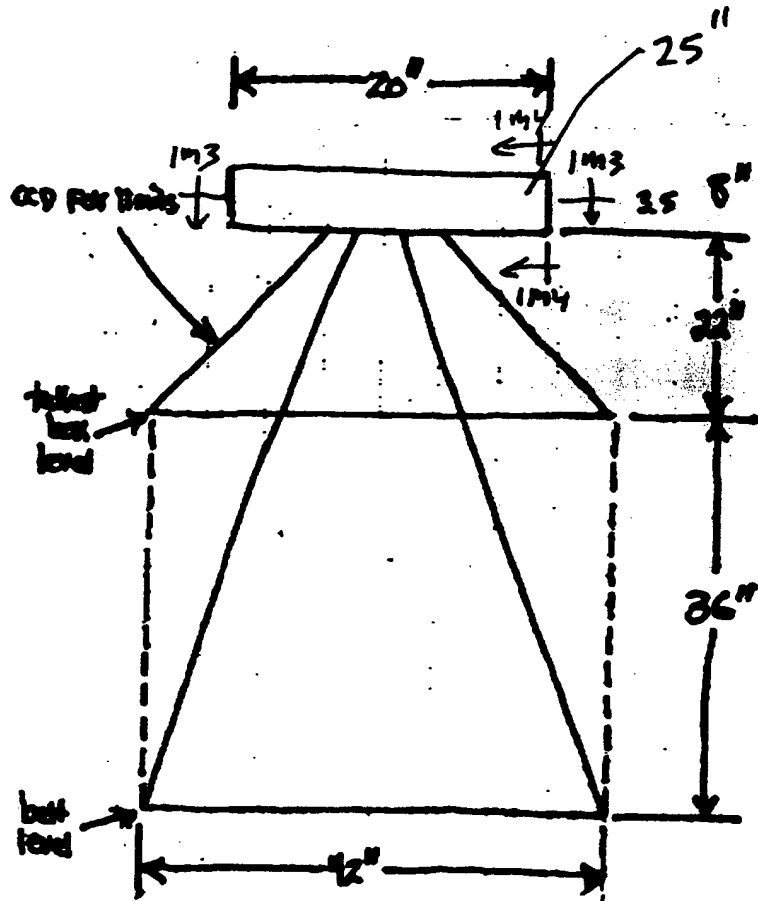


FIG. 6D5

208270" T506500T

CC

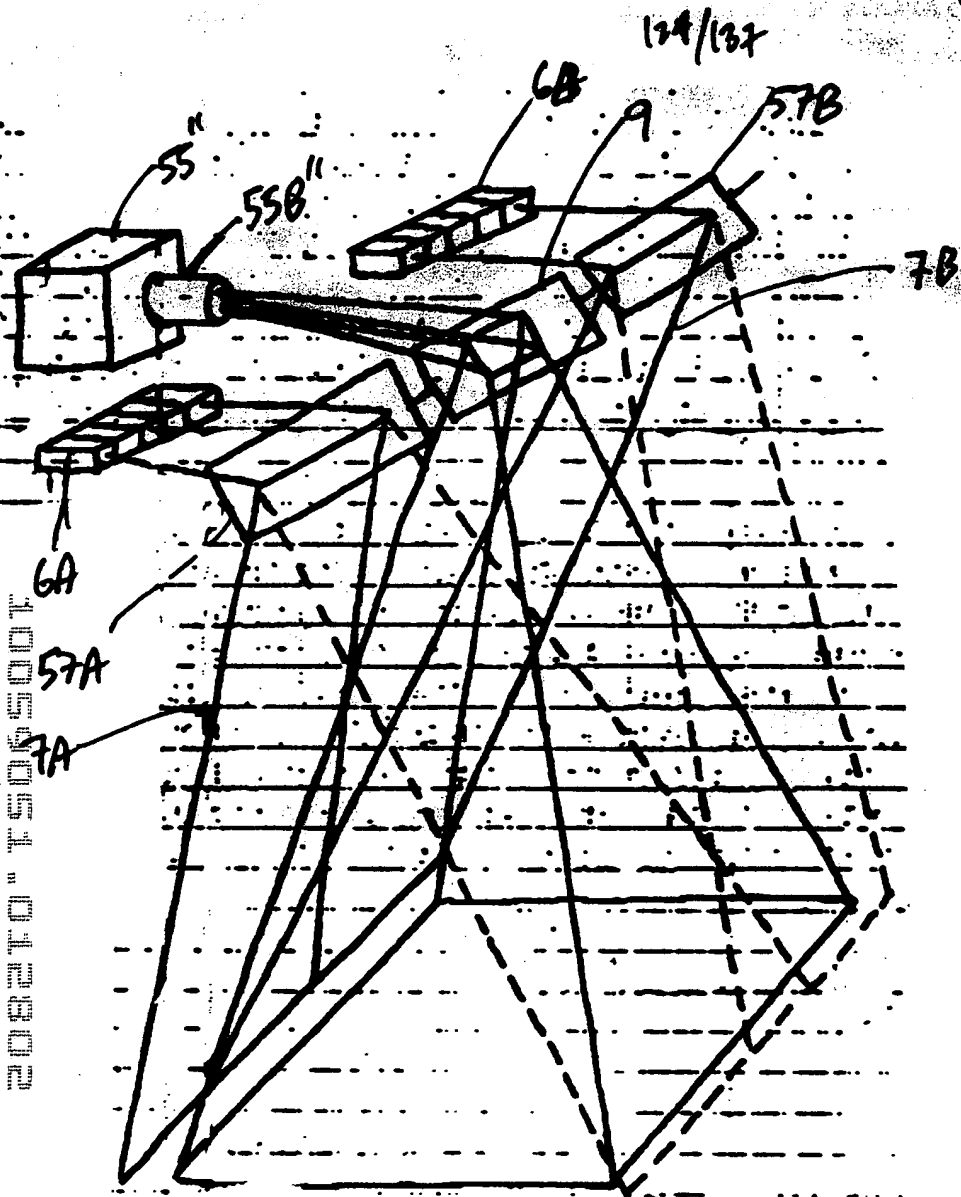
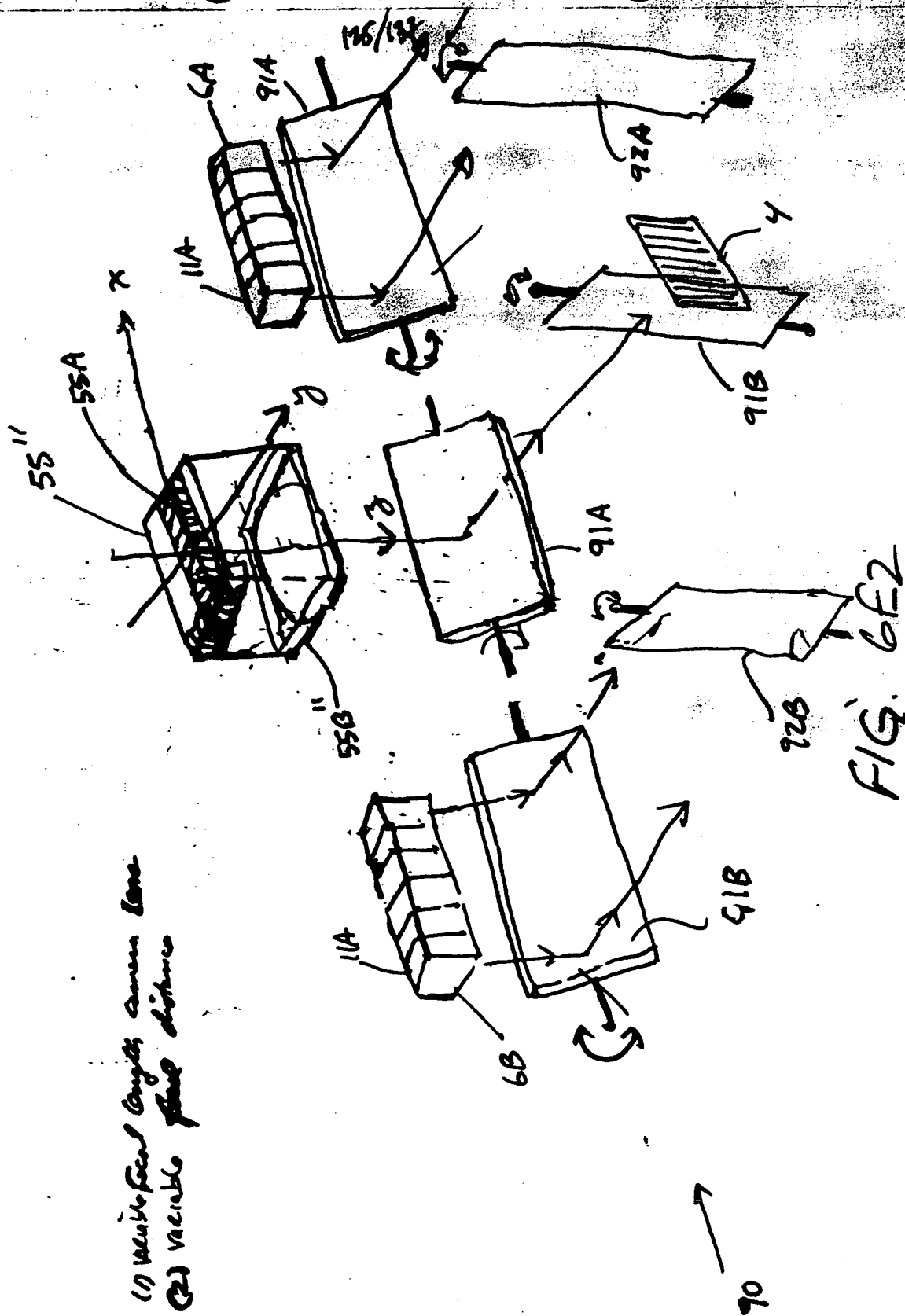
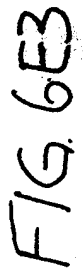


FIG 6E1

(1) variable length curves
(2) variable speed distance



126/137



127/137

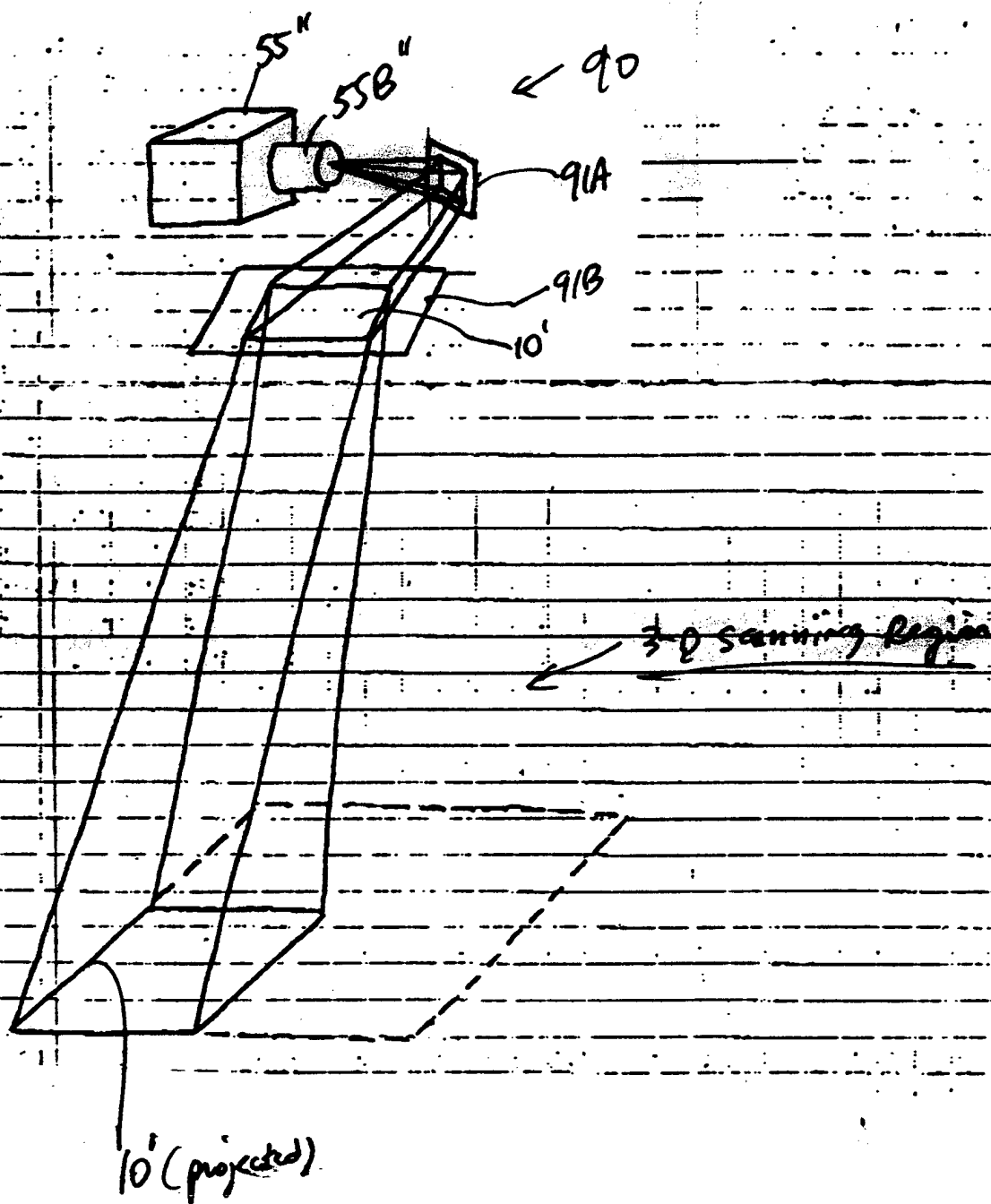
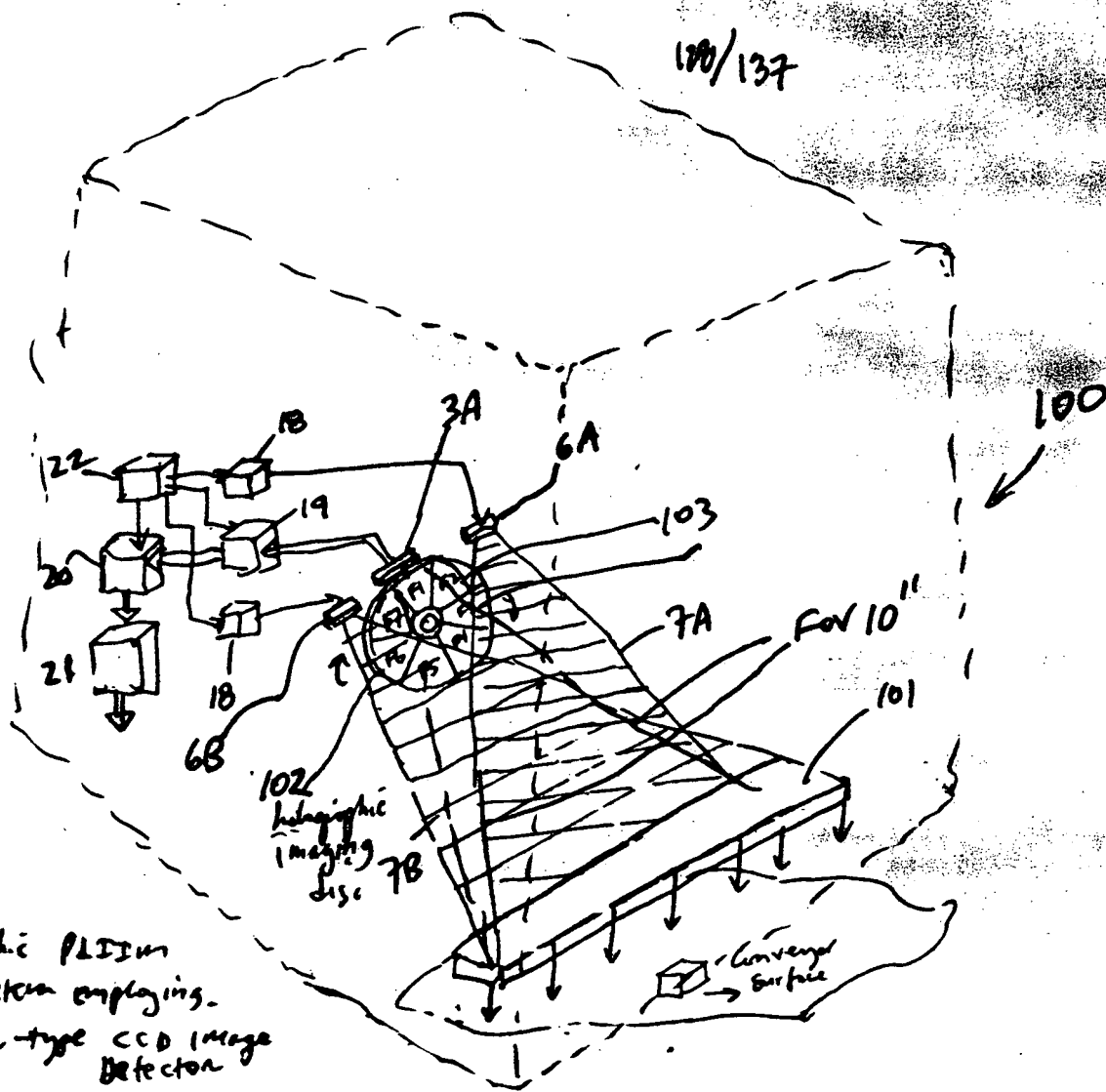


FIG. 6E4

208270 "TS06500T



Holographic PLIIm
System employing
Linear-type CCD image
Detector

FIG. 7A

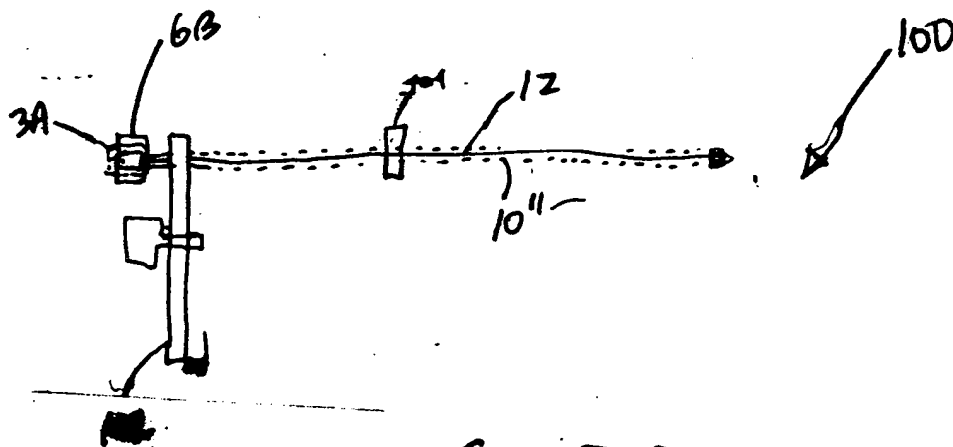
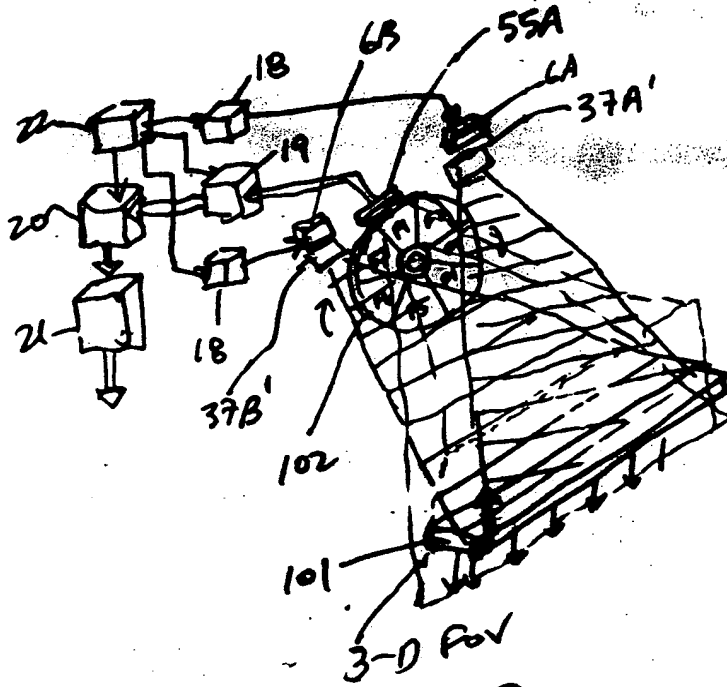


FIG. 7B

129/107



Holographic PLIEM
System employing
Area-Type
CCD Image
Detector
100

FIG. 8A

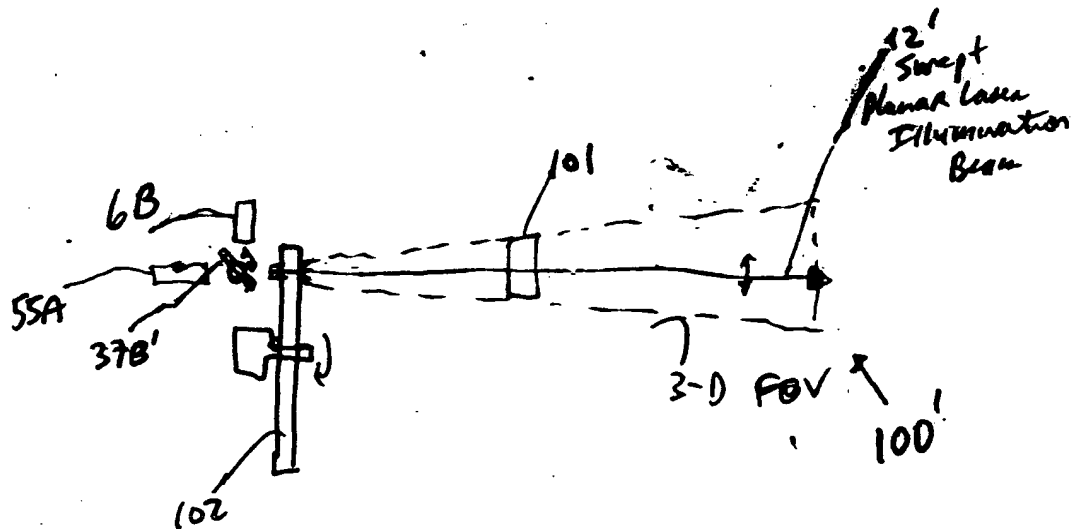


FIG. 8B

2082075065007

130/137

R_{LOCAL} 1-D CCD SCANNER EMBODIMENT

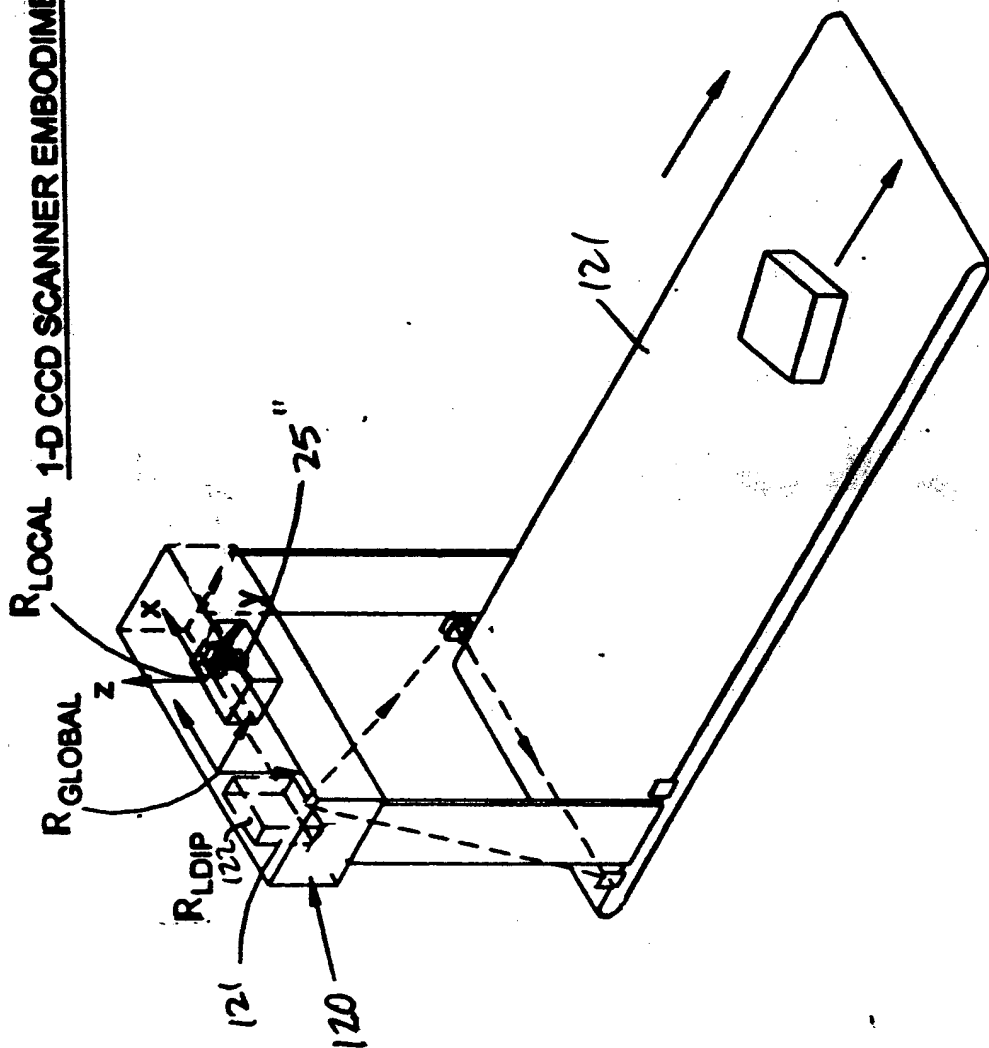


FIG. 9

20021015065001

124/137

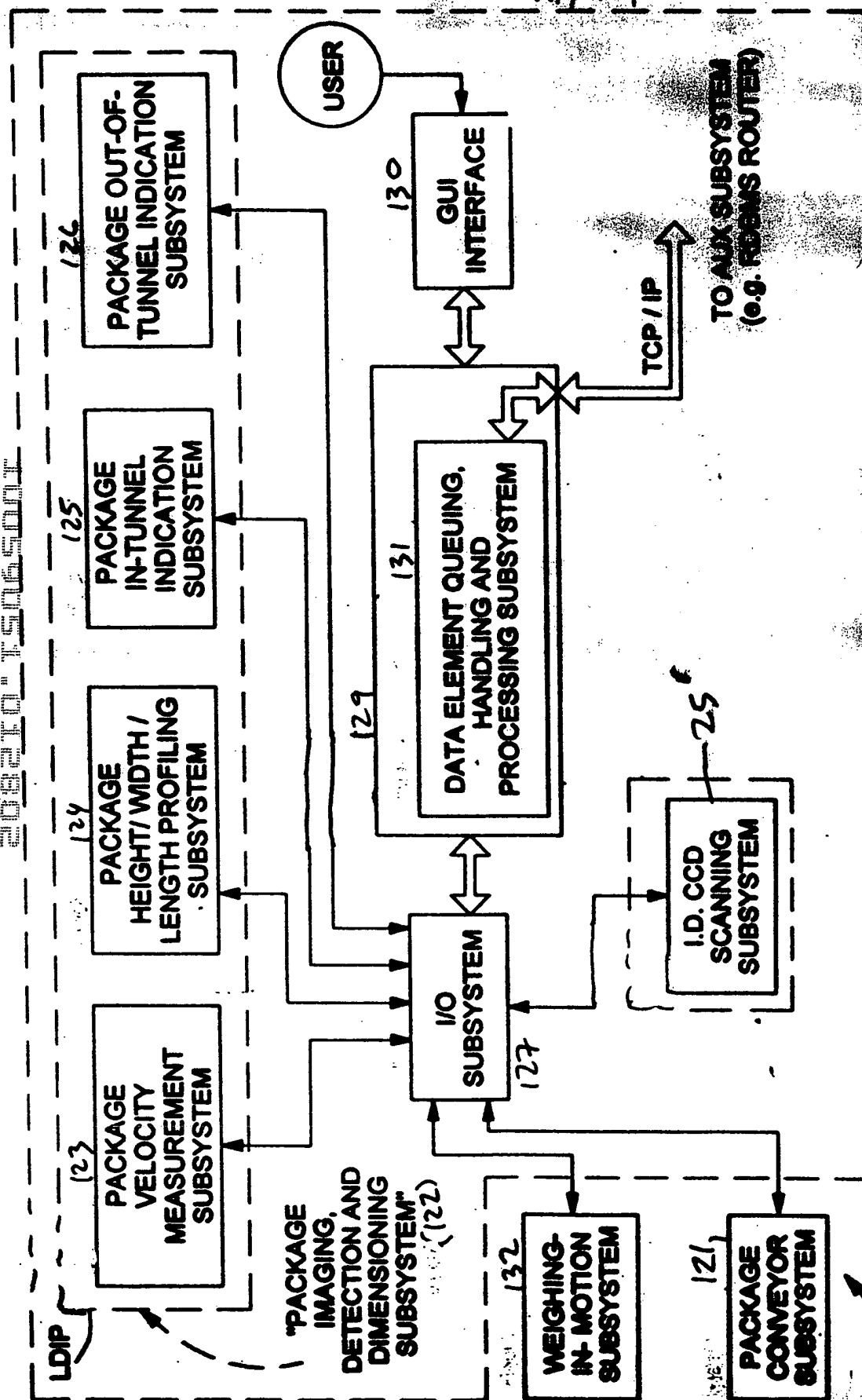


FIG. 10

120

2082FO" T506500T

132/137

LOW RESOLUTION 2D CCD CAMERA (61)
HIGH RESOLUTION 2D CCD CAMERA (55")

LDIP (122)

25"

141

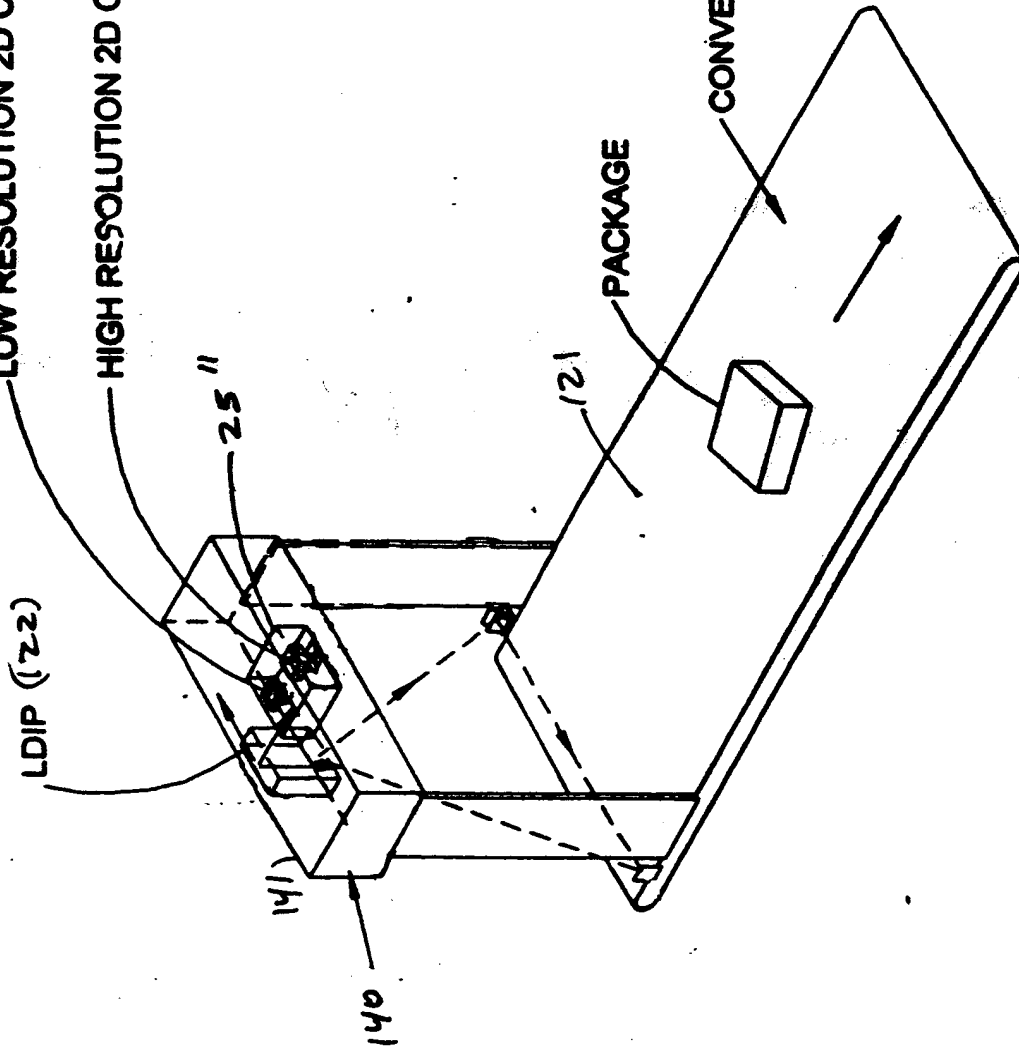
140

121

PACKAGE

CONVEYOR BELT

FIG 11



200210" T506500T

133/137

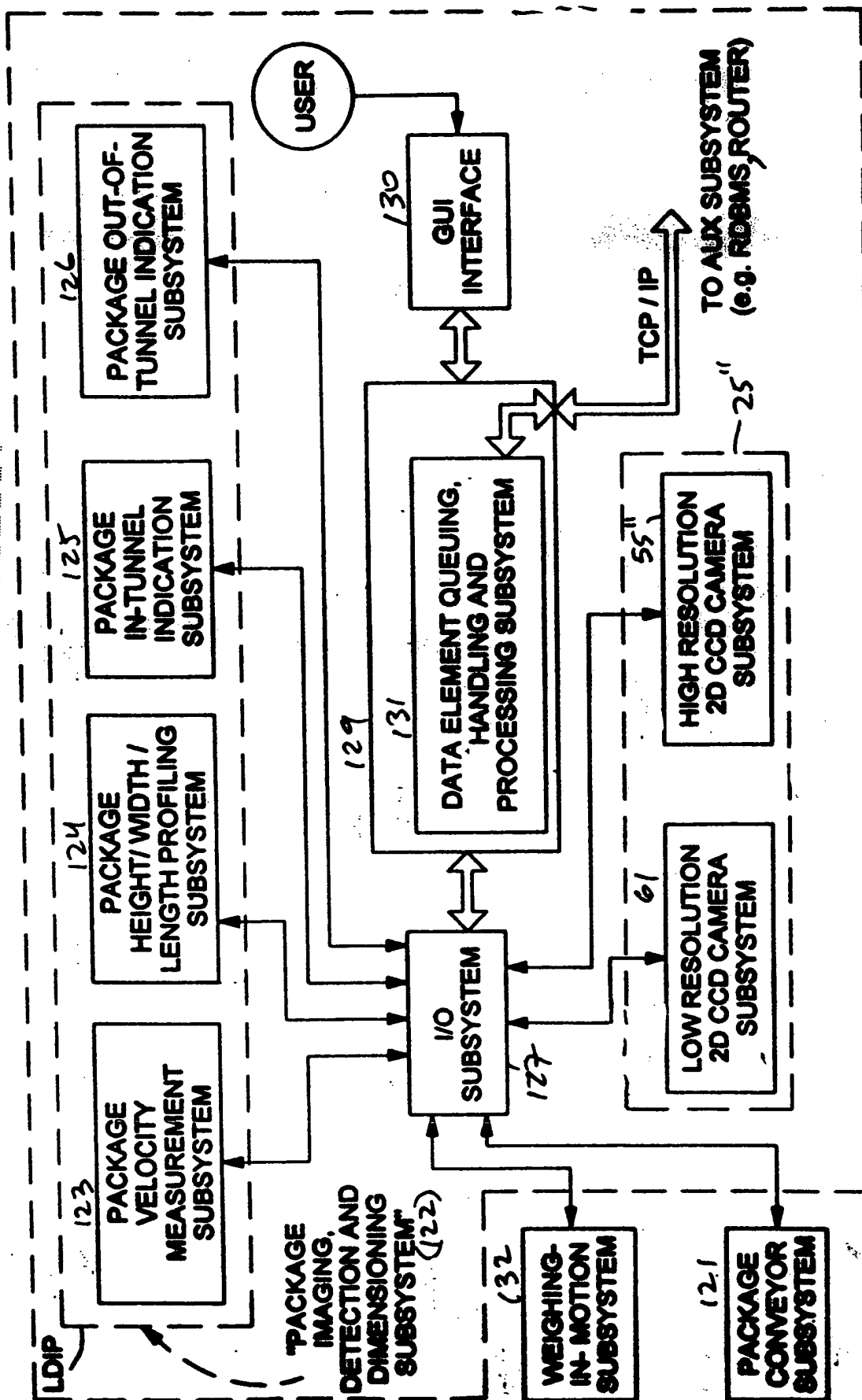


FIG. 12

140

134/134

208210" T506500T

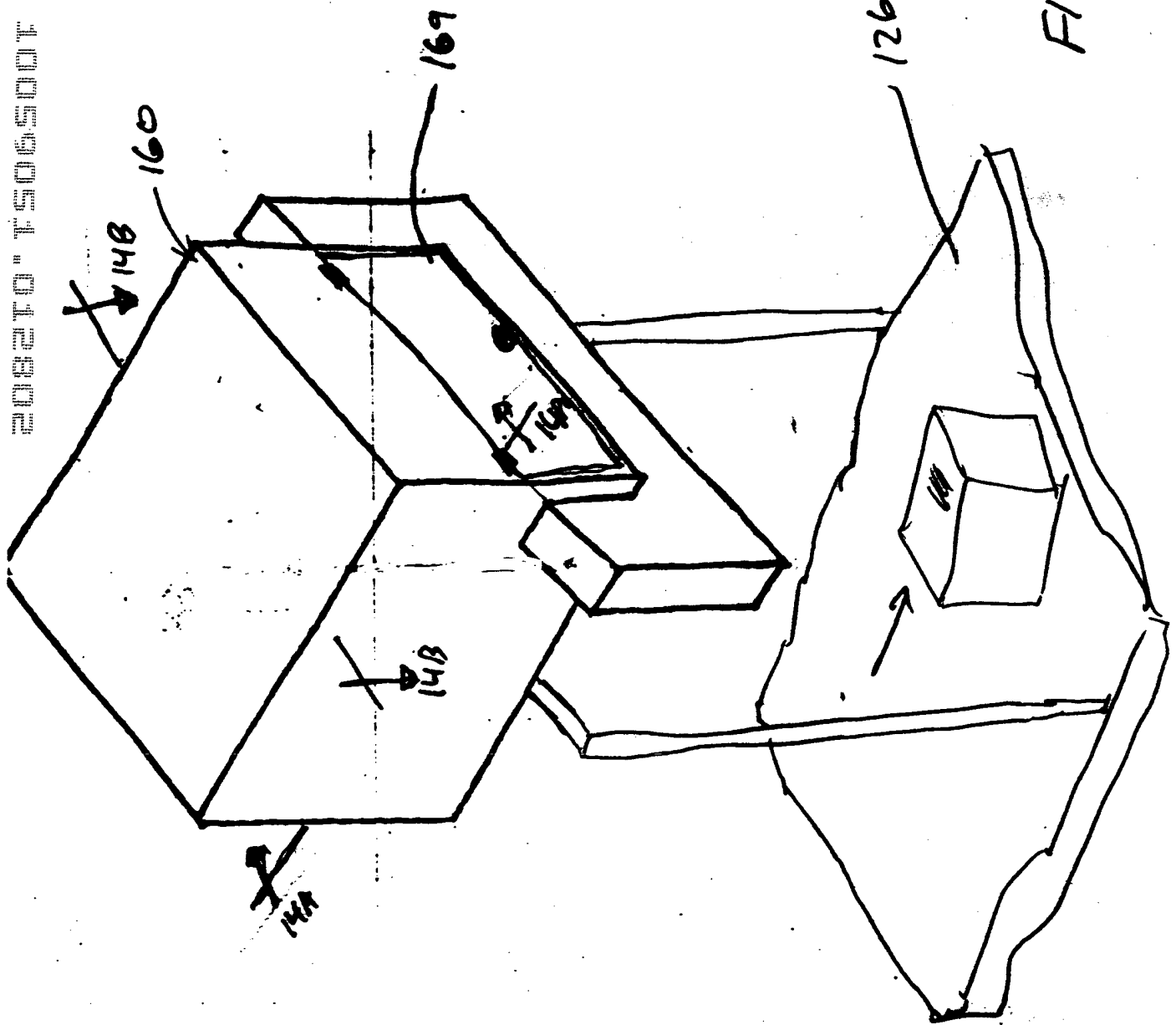
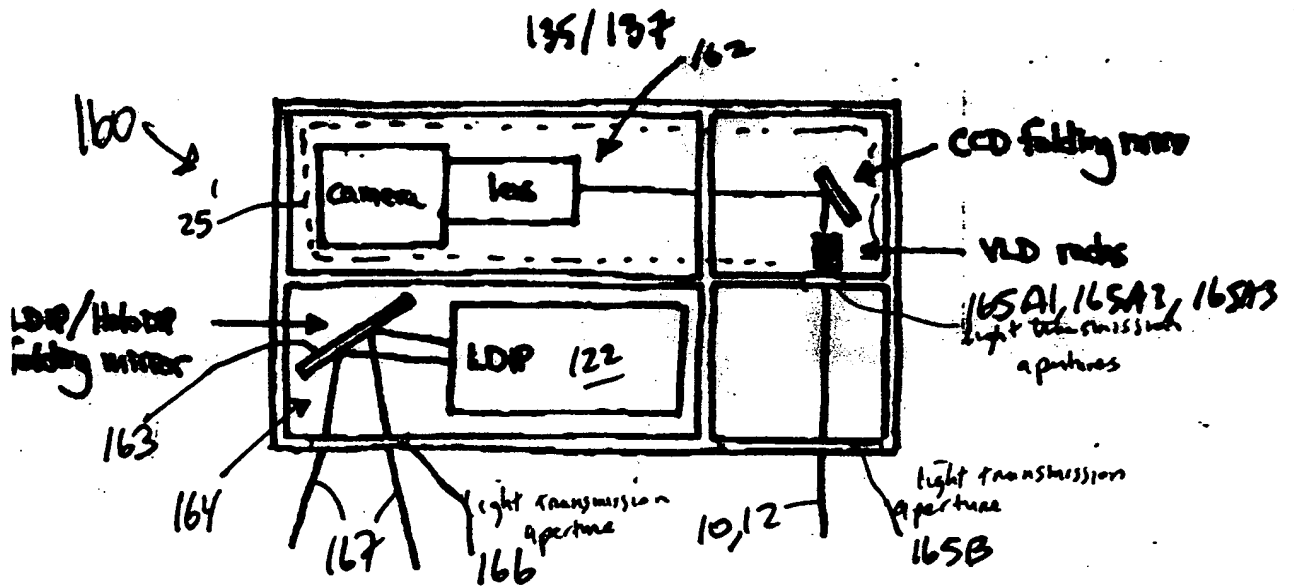


FIG. 13

208210" T506500T



160

FIG. 14A

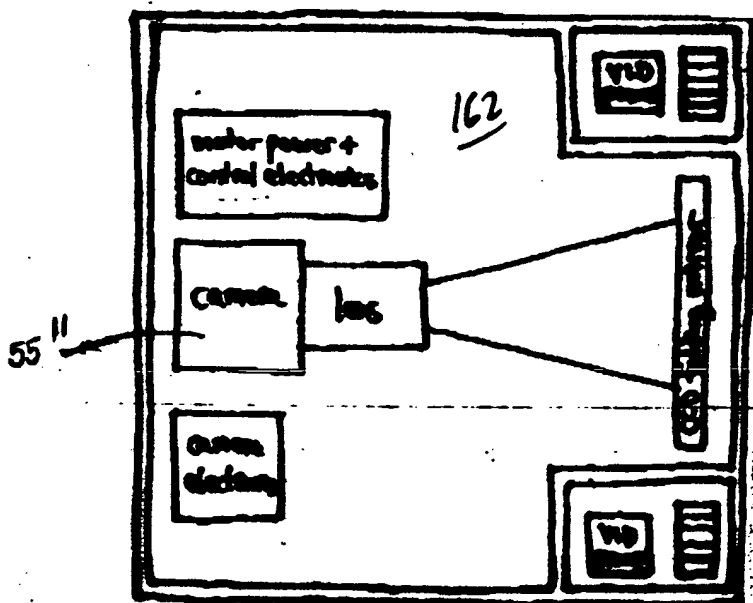


FIG. 14B

136/137

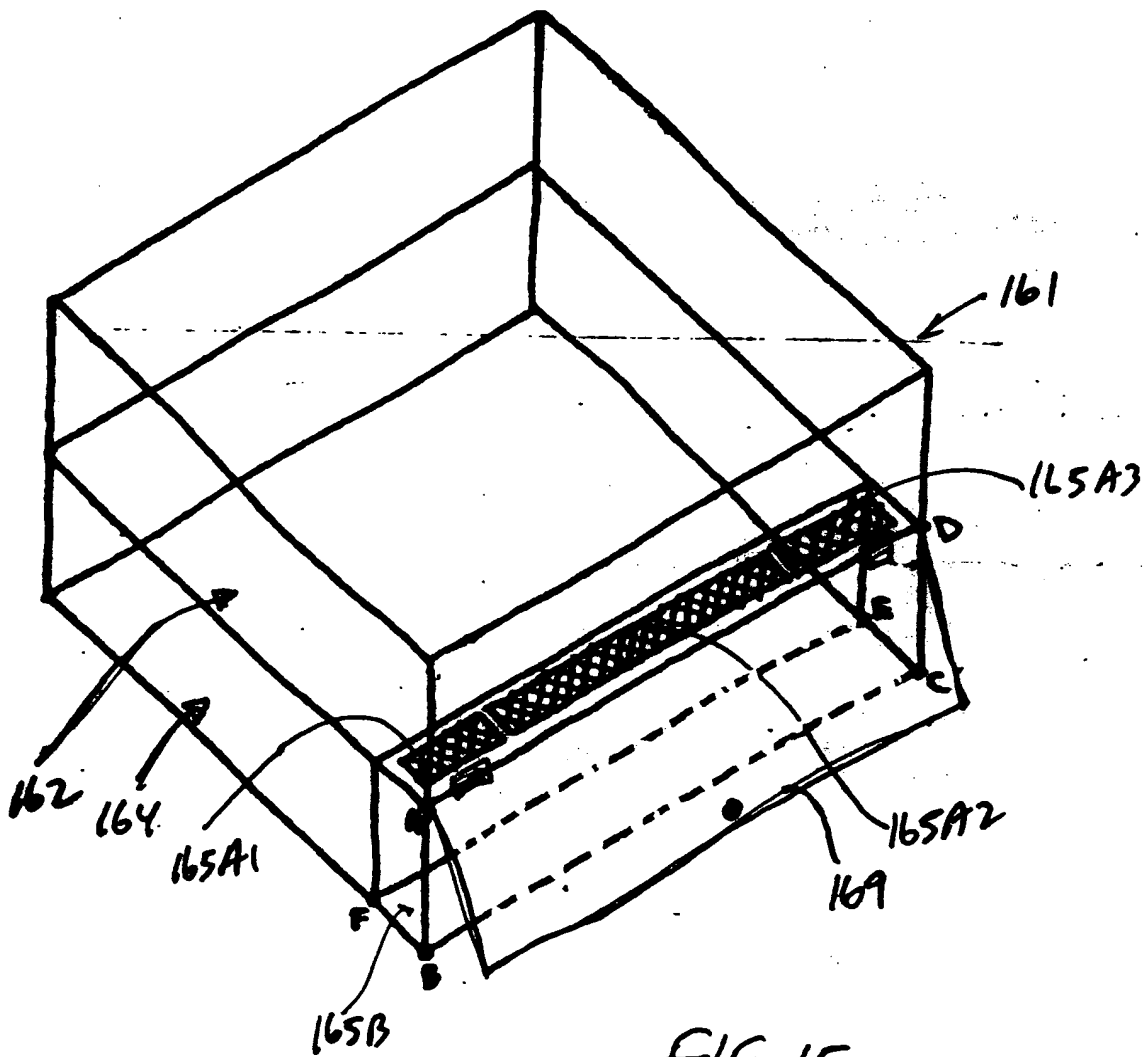


FIG. 15

200270 "TS065007

137/137

208210" T506500T

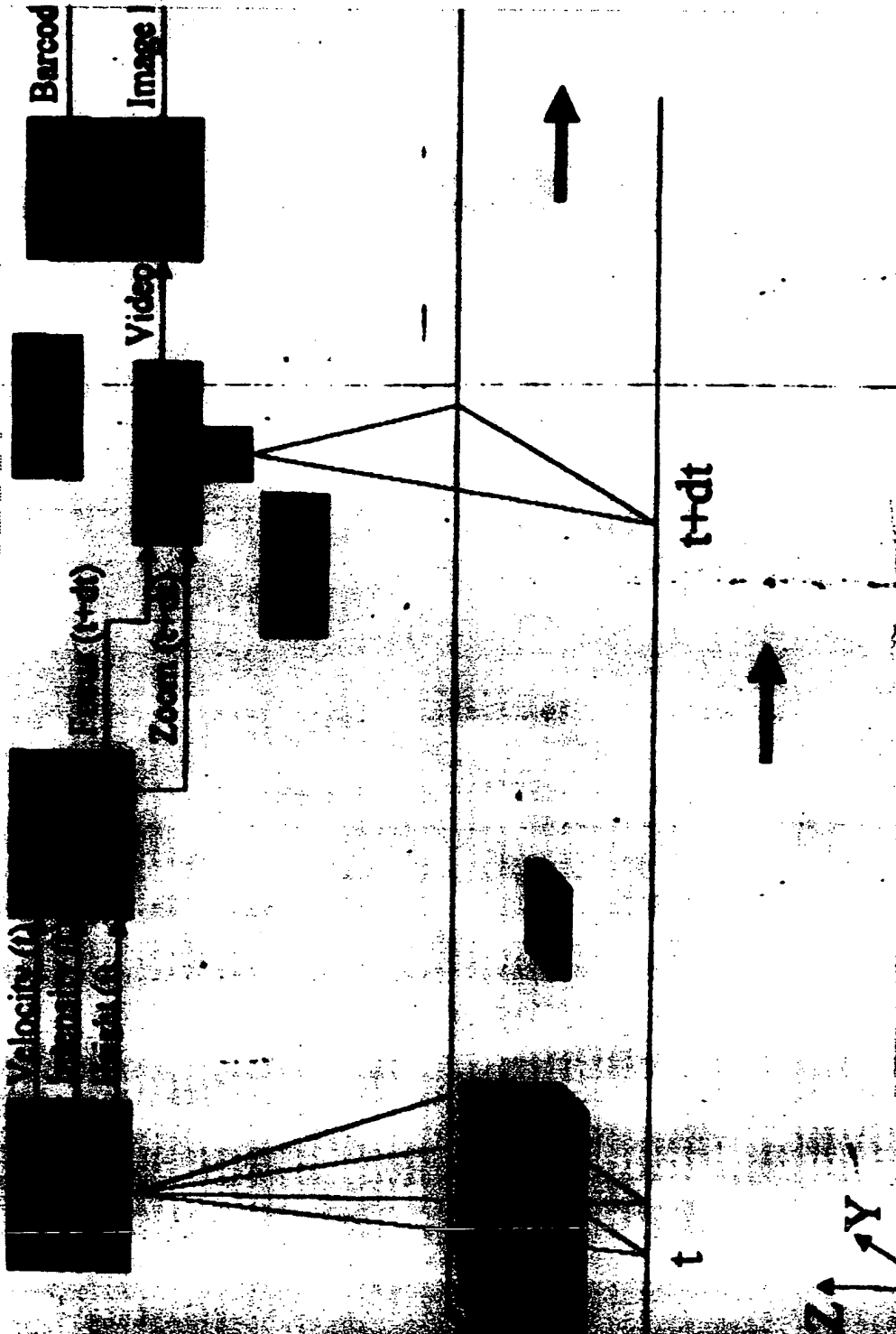


FIG 10
"MicroCam"™ B

FIG 9